INDEX

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Numbers 1-12, 1961

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR
Division of Chemical Science

Numbers 1-12, 1961

Translation of Izvestiya Akademii Nauk SSSR

A

Adadurov, G. A. - 137
Afanas'eva, Yu. A. -1223
Afanas'eva, Yu. A. -1559
Agronomov, A. E. -1962
Akhrem, A. A. -1050
Akhrem, A. A. -1083
Akhrem, A. A. -1691
Akimov, V. M. - 722
Akimov, V. M. -1413
Akimov, V. M. -1450
Akimov, V. M. -1765
Aleksanyan, V. T. -1338
Aleksanyan, V. T. -1344
Aleksiev, B. V. -1263
Alimarin, I. P. -1072
Alimov, A. P. - 654
Alimov, P. I. - 52
An, V. V. -1946
Ananchenko, S. N. - 993
Ananchenko, S. N. -1789
Anan'ev, P. G. -2060
Andreev, N. S. - 348
Andreev, N. S. -1639
Andreev, V. M. -1374
Andreev, V. M. -1525
Andrianov, K. A. - 407
Andrianov, K. A. - 952
Andrianov, K. A. -1353
Andrianov, K. A. -1356
Andrianov, K. A. -1502
Andrianov, K. A. -1507
Andrianov, K. A. -1515
Andrianov, K. A. -1666
Andrianov, K. A. -1670
Andrianov, K. A. -1172
Andrianov, K. A. -1177
Andrianov, K. A. -1868
Andrianov, K. A. -2028
Andrushchenko, N. K. -1144
Anikina, G. N. - 588
Anisimov, K. N. - 55
Anisimov, K. N. - 62
Anisimov, K. N. - 250
Anisimov, K. N. - 253
Anisimov, K. N. -1659
Anisimova, G. F. -1948
Antik, L. V. - 818
Antik, L. V. -2046
Antokhina, L. A. - 940
Arbuzov, A. E. - 762
Arbuzov, A. E. -1132
Arbuzov, A. E. -1652
Arbuzov, B. A. - 43
Arbuzov, B. A. - 940
Arbuzov, B. A. -1877
Arbuzov, B. A. -1884
Arbuzov, B. A. -1190
Arbuzov, B. A. -1197
Arbuzov, B. A. -1520
Arbuzov, B. A. -2020
Arbuzov, B. A. -2023
Arbuzov, Yu. A. - 353
Aronova, N. I. - 866
Aronovich, P. M. - 860
Asanov, U. A. - 205
Asanov, U. A. -1144
Avgul', N. N. - 186
Avgul', N. N. -1300
Avgul', N. N. -1308
Avgul', N. N. -1977
Avramenko, L. I. - 545
Avramenko, L. I. - 552
Avramenko, L. I. - 930
Avramenko, L. I. -1462
Avramenko, L. I. -1839
Avramenko, L. N. -1141

B

Babad-Zakhryapin, A. A. -1953
Babeshkin, A. M. - 3
Baikova, R. I. - 450
Balaban, A. T. -1018
Balandin, A. A. - 31
Balandin, A. A. - 37
Balandin, A. A. - 145
Balandin, A. A. - 194
Balandin, A. A. - 383
Balandin, A. A. - 392
Balandin, A. A. - 521
Balandin, A. A. - 532
Balandin, A. A. - 537
Balandin, A. A. - 705
Balandin, A. A. - 916
Balandin, A. A. -1442
Balandin, A. A. -1447
Balandin, A. A. -1737
Balandin, A. A. -1824
Balandin, A. A. -2046
Balandin, A. A. -2100
Banasevich, S. N. -1334
Baranetskaya, N. K. - 123
Baranetskaya, N. K. -1586
Baranova, N. G. -1415
Barbier, M. - 143
Bardin, V. A. - 877
Bashkirov, A. N. - 432
Batuev, M. I. - 474
Batuev, M. I. -1050
Batuev, M. I. -1691
Bekauri, N. G. - 286
Bekauri, N. G. - 292
Bel'chev, F. V. - 599
Belen'kii, L. I. -1589
Beletskava, I. P. -1830
Beletskaya, I. P. -1123
Beletskaya, I. P. -1127
Beletskaya, I. P. -1328
Beletskaya, I. P. -1458
Beletskaya, I. P. -1483
Beletskaya, I. P. -1863
Beletskaya, I. P. -1985
Beletskaya, I. P. -1989
Beletskaya, I. P. -2036
Belikov, V. M. -1023
Belova, V. I. -1778
Bel'skii, I. F. - 334
Belyavskii, A. B. - 162
Belyavskii, A. B. - 775
Berezin, G. I. - 186
Berezkina, Yu. F. - 902
Bergel'son, L. D. - 329
Bergel'son, L. D. - 677
Bergel'son, L. D. -1959
Bering, B. P. - 376
Bering, B. P. - 509
Bering, B. P. -1817

Berlin, A. M. - 743
Berlin, A. M. -2008
Bochvar, D. A. -2112
Bodanova, A. V. - 105
Bogdanov, R. V. -1334
Bogdanov, V. S. -1417
Bogdanova, O. K. - 392
Bogdanova, O. K. - 532
Bogdanova, A. V. - 657
Bogdanova, A. A. -1172
Bogdanova, A. V. -1715
Bogdanova, A. V. -1930
Bogdanova, A. V. -2073
Bogomol'nyi, V. Ya. -1787
Bogomolov, V. I. -1227
Bol'shakov, K. A. - 688
Bol'shakov, K. A. - 877
Bondar, I. A. - 502
Bondar', I. A. - 682
Bondar', I. A. -1276
Borisov, A. E. - 564
Borisov, A. E. - 672
Borisov, A. E. - 678
Borisov, A. E. - 957
Borisov, A. E. - 960
Borisov, A. E. -1161
Borisov, A. E. -1473
Borisov, A. E. -1477
Borisov, A. E. -2098
Borisova, Z. V. -2093
Bragin, O. V. - 486
Bragin, O. V. -1338
Bragin, O. V. -1344
Brainina, E. M. - 560
Brainina, É. M. -1489
Brainina, E. M. -1601
Brattsev, V. A. -1938
Bruera, T. R. - 516
Brusnikina, B. M. -1062
Brushnikina, V. M. - 437
Bubnova, B. G. -1544
Buchachenko, A. L. -1624
Budnikov, G. K. - 762
Budnikov, G. K. -1132
Budnikov, G. K. -1652
Bugerenko, E. F. -2032
Bukharaeva, R. G. -1218
Bukharaeva, R. G. -1732
Bukharaeva, R. G. -1922
Bukharov, V. G. - 119
Bukhen-Byrlédryanu, L. - 126
Bukhen-Byrlédryanu, L. - 130
Bulavin, L. G. -1963
Burmistrova, M. S. - 644
Burtsev, Yu. N. -1951
Bykov, G. V. -1433
Bykova, E. V. - 613
Bykova, E. V. -1211

C

Chamova, V. N. - 493
Cheburkov, Yu. A. - 747
Cheburkov, Yu. A. - 750
Cheburkov, Yu. A. - 977
Cheburkov, Yu. A. -1370
Chekulaeva, I. A. -1933
Chel'tsova, M. A. - 270
Chel'tsova, M. A. -2065
Chernyshev, E. A. - 410
Chernyshev, E. A. - 419
Chernyshev, E. A. -1604
Cheryshev, E. A. -2032
Cherysheva, A. M. - 9
Chernyshova, A. M. -1805
Chernyshova, A. M. -1971
Chiorénesku, E. - 130
Chistyakov, A. L. -2112
Chkhikvadze, Yu. G. - 644
Chorenésku, E. - 116
Chueva, G. Yu. - 145
Chukovskaya, E. Ts. -1168
Chuksanova, A. A. -1688

D

Daniel', N. V. -1236
Danilov, S. N. -1396
Datsko, V. G. - 171
Davidenkova, V. V. - 831
Davydova, G. V. - 674
Davydova, S. L. - 336
Davydova, S. L. -1844
Debabov, V. G. -1047
Delazari, N. V. -1177
Delazari, N. V. -2028
Denikeeva, M. F. -1774
Denisenko, V. P. -1782
Denisov, E. T. - 736
Dianova, E. N. -1197
Dmitriev, M. A. - 569
Dmitriev, M. A. - 572
Dmitriev, M. A. - 975
Dmitriev, S. A. -1678
Dmitrevskii, N. N. -2060
Dobrosel'skaya, N. P. - 521
Dobrynina, T. P. - 797
Dolgaya, M. E. -1604
Dolgii, I. E. - 458
Dolgoplosk, B. A. -1787
Dolgov, B. N. - 989
Domnina, E. S. -1780
Dorokhov, V. A. -1082
Dorokhov, V. A. -1251
Dorokhov, V. A. -1944
Dremin, A. N. - 137
Dubinin, M. M. - 14
Dubinin, M. M. - 182
Dubinin, M. M. - 24
Dubinin, M. M. - 363
Dubinin, M. M. - 368
Dubinin, M. M. - 693
Dubinin, M. M. -1097
Dubinin, M. M. -1286
Dubinin, M. M. -1293
Dubinin, N. M. - 902
Dubovik, N. A. -1392
Dubovitskii, V. A. - 403
Dudunskaya, A. A. - 168
Dudinskaya, A. A. - 482
Dudinskaya, A. A. - 484
Dudinskaya, A. A. - 640
Dyatkin, B. L. -1408
Dyatlovitskaya, É. V. - 329
Dyumaev, K. M. - 151
Dyumaev, K. M. - 154
Dzhi-yuan', Li -1361
Dzhurinskaya, N. G. -1956

E

Egorov, Yu. P. - 410
Egorov, Yu. P. -1168
Egorov, Yu. P. -1844
Egorov, Yu. P. -1993
Eidus, Ya. T. - 310
Eidus, Ya. T. - 825
Eidus, Ya. T. -1040
Eidus, Ya. T. -1241
Eidus, Ya. T. -1580
Eidus, Ya. T. -1744
Eidus, Ya. T. -1747
El'tekov, Yu. A. - 516
El'yanov, B. S. - 870
Émanuél', N. M. - 198
Émanuel', N. M. - 729
Enikolopyan, N. S. - 210
Erashko, I. T. -1105
Eremin, Yu. G. - 688
Eremin, Yu. G. - 877
Erokhina, V. R. -1580
Erokhina, V. R. -1744
Erokhina, V. R. -1747
Ershov, N. I. -1580
Ershov, N. I. -1744
Ershov, N. I. -1747
Értel', G. - 241

Érzyutova, E. I. -2055
Evstigneeva, R. P. - 698

F

Fainzil'berg, A. A. - 303
Fainzil'berg, A. A. - 622
Fainzil'berg, A. A. - 633
Fedorova, R. G. -1598
Fedorovskaya, É. A. -1427
Fedorovskaya, É. A. -2090
Fedotov, N. S. -1788
Fisher, L. B. -1780
Freidlin, L. K. - 348
Freidlin, L. Kh. - 132
Freidlin, L. Kh. - 338
Freidlin, L. Kh. - 662
Freidlin, L. Kh. -1033
Freidlin, L. Kh. -1059
Freidlin, L. Kh. -1064
Freidlin, L. Kh. -1180
Freidlin, L. Kh. -1598
Freidlin, L. Kh. -1765
Freidlin, L. Kh. -1872
Freidlina, R. Kh. - 47
Freidlina, R. Kh. - 156
Freidlina, R. Kh. - 162
Freidlina, R. Kh. - 560
Freidlina, R. Kh. - 775
Freidlina, R. Kh. - 969
Freidlina, R. Kh. -1164
Freidlina, R. Kh. -1168
Freidlina, R. Kh. -1489
Freidlina, R. Kh. -1601
Freidlina, R. Kh. -1853
Freidlina, R. Kh. -1963

G

Gaidamovich, N. N. -1080
Gaidamovich, N. N. -1682
Galakhov, F. Ya. - 497
Galakhov, F. Ya. -1271
Galkin, A. F. - 345
Gal'pern, G. D. - 277
Gambaryan, N. P. - 72
Gavrilenko, V. V. - 336
Gavrilenko, V. V. -2105
Gavrilova, A. E. -1344
Gavrilova, A. E. -1576
Gavrilova, A. E. -1595
Genich, A. P. -1468
Genya, A. -1018
German, L. S. -1408
Gilyarov, V. A. - 755
Gilyarov, V. A. - 758
Gilyarov, V. A. - 945
Girshovich, A. S. -2008
Glazunov, P. Ya. - 521
Glukhovtsev, V. G. - 99
Glukhovtsev, V. G. - 858
Glukhovtsev, V. G. -1776
Glukhovtsev, V. G. -2107
Glushkova, N. E. - 989
Go, Chun'-i, -2055
Godina, N. A. -1613
Godina, N. A. -1619
Godovikova, S. N. - 331
Godovikova, T. I. - 963
Godunova, L. F. -2100
Golubeava, N. E. -1206
Golubeva, N. E. -1208
Gol'dfarb, Ya. L. - 331
Gol'dfarb, Ya. L. - 463
Gol'dfarb, Ya. L. - 818
Gol'dfarb, Ya. L. -1589
Golubeva, E. I. -1477
Gonikberg, M. G. - 454
Gonikberg, M. G. - 870
Gonikberg, M. G. -1576
Gonikberg, M. G. -1595
Gorban', A. K. -1761
Gorban', A. K. -1782
Gorbanev, A. I. -1410
Gorbunov, N. S. -1953
Gorelik, V. P. - 644
Gorshkov, V. I. - 338
Gorshkov, V. I. -1033
Gracheva, E. P. - 858
Gracheva, E. P. - 935
Grigos, V. I. - 270
Grushnikov, O. P. -1688
Gudkova, A. S. - 237
Gulevskaya, V. I. - 622
Gulevskaya, V. I. - 633
Gurvich, I. A. -1067
Gur'yanova, T. P. -1483
Gur'yanova, T. P. -1863
Gur'yanova, T. P. -2036

I

Ibragimov, F. -1026
Ignonina, I. I. - 647
Ilyukhina, L. I. -1959
Iordanov, B. I. -1263
Isagulyants, G. V. -1447
Iskhakova, É. Kh. - 81
Iskhakova, É. Kh. - 277
Ivanov, Ch. P. -1263
Ivanov, V. I. - 479
Ivanov, V. I. - 858
Ivanov, V. I. - 863
Ivanov, V. I. -1774
Ivanova, L. N. -1253
Ivanova, L. S. - 14
Ivanova, V. S. - 479
Ivleva, I. N. - 171
Izmailov, R. I. - 94
Izmailov, R. I. -1218

K

Kabachnik, M. I. - 246
Kabachnik, M. I. - 556
Kabachnik, M. I. - 755
Kabachnik, M. I. - 758
Kabachnik, M. I. - 945
Kabachnik, M. I. -1770
Kabachnik, M. I. -1891
Kabanova, O. N. -1438
Kadlets, O. - 363
Kagan, Yu. B. - 432
Kaliberdo, L. M. - 651
Kamemitskii, A. V. -1050
Kamemitskii, A. V. -1691
Kamyshova, A. A. - 336
Karachevtsev, G. V. -1428
Karakhanov, É. A. -1914
Karasharli, K. A. - 158
Karavaev, N. M. -1678
Karpavichus, K. I. -1206
Karpavichus, K. I. -1208
Karpov, V. I. -1830
Karpov, V. I. -1985
Karpov, V. I. -1989
Kasatochkin, V. I. - 14
Kasatochkin, V. I. - 24
Kashaev, S. Kh. G. -1218
Kashkovskaya, L. K. -1413
Katsobashvili, Ya. R. - 223
Kaverov, A. T. - 14
Kaverzneva, E. D. - 676
Kayutenko, L. A. - 450
Kazakova, V. M. -1426
Kazanskii, B. A. - 486
Kazanskii, B. A. -1338
Kazanskii, B. A. -1344
Kazennikova, G. V. - 772
Kazennikova, G. V. - 982
Kazennikova, G. V. - 985
Keler, É. K. -1613
Keler, É. K. -1619
Keler, É. K. -1797
Kessler, Yu. M. -1410
Khait, Yu. L. - 713
Khait, Yu. L. -1110
Khananashvili, L. M. - 952
Kharitonov, N. P. - 989

Kharlamov, N. P. -1286
Khismatullina, A. G. -1190
Khismatullina, A. G. -1520
Khmel'nitskii, L. I. - 440
Khmel'nitskii, L. I. - 627
Khodakov, Yu. S. - 668
Khodakov, Yu. S. -1138
Khodakov, Yu. S. -1331
Khomutov, A. M. - 324
Khomutov, A. M. - 450
Khomutov, A. M. - 654
Khomutov, A. M. -1030
Khomutov, A. M. -1763
Khomutov, A. M. -1933
Khomutov, A. M. -2077
Khomutova, N. M. -1763
Khomutova, N. M. -1933
Khorlina, I. M. -1057
Khorlina, I. M. -1768
Khurgin, Yu. I. - 141
Kil'disheva, O. V. -1206
Kil'disheva, O. V. -1208
Kiselev, A. V. - 186
Kiselev, A. V. -1300
Kiselev, A. V. -1308
Kiselev, A. V. -1977
Kiselev, V. G. - 488
Kiseleva, T. M. -1662
Kislinskii, A. N. - 277
Kitaev, Yu. P. - 762
Kitaev, Yu. P. -1132
Kitaev, Yu. P. -1652
Klabunovskii, E. I. -1737
Klabunovskii, E. I. -1962
Klabunovskii, E. I. -2046
Klabunovskii, E. I. -2100
Kleimenova, V. M. - 603
Kleopina, G. V. - 676
Kliger, G. A. - 432
Klimenko, N. M. -1261
Klimova, V. A. - 160
Klimova, V. A. -1948
Klimova, V. A. -2088
Klyachko-Gurvich, A. L. - 722
Klyachko-Gurvich, A. L. -1427
Klyachko -Gurvich, A. L. -1450
Klyachko-Gurvich, A. L. -1756
Klyukina, L. D. -1259
Knunyants, I. L. - 72
Knunyants, I. L. - 77
Knunyants, I. L. - 560
Knunyants, I. L. - 572
Knunyants, I. L. - 747
Knunyants, I. L. - 750
Knunyants, I. L. - 752
Knunyants, I. L. - 972
Knunyants, I. L. - 975
Knunyants, I. L. - 977
Knunyants, I. L. -1206
Knunyants, I. L. -1208
Knunyants, I. L. -1361
Knunyants, I. L. -1367
Knunyants, I. L. -1370
Knunyants, I. L. -1408
Knunyants, I. L. -1499
Knunyants, I. L. -1785
Kocheshkov, K. A. - 769
Kocheshkov, K. A. - 772
Kocheshkov, K. A. - 982
Kocheshkov, K. A. - 985
Kocheshkov, K. A. -1857
Kocheshkov, K. A. -2116
Kolesnikov, G. S. - 336
Kolesnikov, G. S. -1844
Kolesnikova, R. V. - 545
Kolesnikova, R. V. - 552
Kolesnikova, R. V. - 930
Kolesnikova, R. V. -1141
Kolesnikova, R. V. -1462
Kolesnikova, R. V. -1839
Kolobova, N. E. - 62
Kolodkin, F. L. -1026
Kolosov, M. N. - 353
Komarov, N. V. - 647
Komarov, N. V. - 651
Konareva, G. P. - 210
Kondakova, M. S. - 463
Kondrat'ev, D. A. - 670
Kondrat'ev, D. A. - 792
Kondrat'ev, D. A. - 809
Kondrat'ev, D. A. -1556
Kondrat'eva, G. V. - 490
Konenko, I. R. - 31
Konenko, I. R. - 37
Konenko, I. R. - 194
Konovalova, S. F. - 497
Konovalova, S. F. -1271
Kononov, N. F. -1413
Kopylova, B. V. - 156
Kopylova, B. V. - 253
Kopylova, B. V. -1853
Korchemnaya, Ts. B. -1023
Koreshkov, Yu. D. -1262
Korneva, V. V. - 139
Korneva, V. V. -1784
Kornilov, I. I. - 178
Korosteleva, G. S. -1415
Korsun, A. G. - 729
Kost, V. N. -1164
Kotlyarevskii, I. L. -1710
Kotlyarevskii, I. L. -1780
Koton, M. M. -1662
Kovaleva, L. S. - 801
Kovredov, A. I. -1477
Koz'mina, O. P. -2081
Krasnaya, Zh. A. -1078
Kravchenko, N. A. - 676
Kretalova, L. D. -1450
Krichko, A. A. -1587
Kruglova, N. V. - 672
Krylova, G. A. - 858
Krysteva, M. A. -1263
Kucherov, V. F. - 263
Kucherov, V. F. - 578
Kucherov, V. F. - 583
Kucherov, V. F. - 779
Kucherov, V. F. - 866
Kucherov, V. F. -1005
Kucherov, V. F. -1067
Kucherov, V. F. -1078
Kucherov, V. F. -1247
Kucherov, V. F. -1249
Kucherov, V. F. -1253
Kucherov, V. F. -1374
Kucherov, V. F. -1420
Kucherov, V. F. -1525
Kucherov, V. F. -1534
Kucherov, V. F. -1538
Kucherov, V. F. -1695
Kucherov, V. F. -1702
Kucherov, V. F. -1706
Kucherov, V. F. -1905
Kucherov, V. F. -2040
Kudryavtsev, G. I. -1598
Kudryavtsev, V. V. -2093
Kudryavtseva, L. F. - 490
Kudryavtseva, M. I. -2020
Kukhticheva, V. F. - 223
Kukina, A. I. - 526
Kunitskaya, G. M. - 55
Kunitskaya, G. M. - 62
Kunitskaya, G. M. - 250
Kunitskaya, G. M. -1784
Kurashev, M. V. - 282
Kurkova, N. S. - 223
Kursanov, D. N. - 123
Kursanov, D. N. - 355
Kursanov, D. N. - 613
Kursanov, D. N. - 617
Kursanov, D. N. -1211
Kursanov, D. N. -1262
Kursanov, D. N. -1586
Kursanov, D. N. -1940
Kuz'mina, T. N. - 223
Kuznetsov, D. I. -1072

Kuznetsov, N. V. -1392
Kuznetsov, N. V. -1570
Kuznetsova, I. K. -1353
Kuznetsova, I. K. -1670
Kuznetsova, N. L. - 552
Kuznetsova, N. L. -1462
Kuznetsova, V. P. - 647
Kuznetsova, Z. I. - 863

L

Ladeinova, L. V. - 9
Ladeinova, L. V. - 889
Ladeinova, L. V. -1085
Ladeinova, L. V. -1091
Ladeinova-Soboleva, L. V. -1805
Ladeinova-Soboleva, L. V. -1811
Ladeinova-Soboleva, L. V. -1971
Lamanova, I. A. -1218
Lamanova, I. A. -1732
Lamanova, I. A. -1922
Landau, M. A. - 397
Larina, G. N. -1566
Lazarev, A. N. - 894
Le, B. - 94
Le, B. -1218
Le, B. -1732
Le, B. -1922
Lebedev, B. L. - 429
Lebedev, B. L. -1918
Lebedev, B. L. -2052
Lebedev, O. V. - 440
Lebedev, O. V. - 627
Lebedeva, A. I. -1256
Leites, L. A. - 410
Leites, L. A. -1844
Leites, L. A. -1993
Lemin, N. N. -1776
Lenshina, N. Ya. - 479
Lenshina, N. Ya. -1774
Leont'ev, E. A. - 368
Leonov, A. I. -1314
Leonov, A. I. -1797
Leonov, V. N. - 993
Leonov, V. N. -1789
Levitskii, É. A. - 223
Liberman, A. L. - 486
Liberman, A. L. -1338
Liberman, A. L. -1344
Li Chai-Yuan -1785
Likhacheva, O. A. - 509
Likhobabenko, V. S. - 223
LiKuang-hien - 454
Lipatova, I. P. - 94
Lipatova, I. P. -1218
Lipatova, I. P. -1732
Lipatova, I. P. -1922
Lishcheta, L. I. -1631
Li Shi -1914
Litvin, E. F. -1059
Litvin, E. F. -1064
Litvin, E. F. -1737
Litvin, E. F. -1765
Litvinov, V. P. - 148
Lobzova, A. V. -1040
Loginov, G. A. - 670
Loginov, G. A. -1556
Lomonosov, M. V. - 916
Lopatin, B. V. - 105
Lopatin, B. V. -1752
Lovachev, L. A. -1153
Lozhkina, L. G. - 9
Lubuzh, E. D. -1014
Lubuzh, E. D. -1168
Luk'yanovich, V. M. - 368
Luk'yanovich, V. M. -1286
Lushchik, V. V. - 831
Lygina, I. A. - 186
Lygina, I. A. -1300
Lygina, I. A. -1308
Lygina, I. A. -1977
Lyubomudrov, E. B. -1117

M

Mairanovskaya, É. F. - 853
Mairanovskii, S. G. - 853
Mairanovskii, S. G. -1023
Mairanovskii, S. G. -1259
Mairanovskii, S. G. -1631
Mairanovskii, S. G. -2003
Mairanovskii, S. G. -2095
Makarov, N. V. - 869
Makarov, S. Z. - 889
Makarov, S. Z. -1085
Makarov, S. Z. -1805
Makarov, S. Z. -1811
Makarov, S. Z. -1971
Makarov, Yu. V. -1370
Makarova, L. G. -1772
Maksimov, V. I. -1047
Maksimov, Vyach. I. - 173
Mal'tseva, A. L. - 858
Malysheva, T. G. -1547
Malysheva, T. G. -1720
Malysheva, T. G. -1725
Mamedaliev, G. M. - 588
Mamedaliev, G. M. - 801
Manakov, M. N. -1603
Markin, M. I. -1428
Markov, M. A. -1138
Markov, M. A. -1402
Martinkova, N. S. -1940
Masolova, F. A. - 223
Mastryukov, É. A. - 268
Matveeva, A. D. - 474
Matveeva, A. D. -1050
Matveeva, A. D. -1691
Matveeva, M. K. -1772
Matyushenko, V. Kh. - 537
Medved', T. Ya. - 556
Medved', T. Ya. - 246
Medved', T. Ya. -1891
Meshcheryakov, A. P. - 99
Meshcheryakov, A. P. - 458
Meshcheryakov, A. P. - 858
Meshcheryakov, A. P. -1776
Meshcheryakov, A. P. -2055
Meshcheryakov, A. P. -2107
Meshcheryakov, A. P. -2110
Mikhailenko, I. E. - 521
Mikhailov, B. M. - 345
Mikhailov, B. M. - 488
Mikhailov, B. M. - 860
Mikhailov, B. M. -1054
Mikhailov, B. M. -1076
Mikhailov, B. M. -1081
Mikhailov, B. M. -1082
Mikhailov, B. M. -1251
Mikhailov, B. M. -1788
Mikhailov, B. M. -1944
Mikhailov, B. M. -1962
Mikhailova, E. A. -1338
Mikhailova, E. A. -1344
Miller, V. B. -1834
Minachev, Kh. M. - 88
Minachev, Kh. M. - 92
Minachev, Kh. M. - 668
Minachev, Kh. M. - 670
Minachev, Kh. M. - 809
Minachev, Kh. M. -1138
Minachev, Kh. M. -1215
Minachev, Kh. M. -1223
Minachev, Kh. M. -1331
Minachev, Kh. M. -1402
Minachev, Kh. M. -1552
Minachev, Kh. M. -1556
Minachev, Kh. M. -1559
Minacheva, M. Kh. -1601
Minaeva, I. N. -1083
Mironov, V. F. -1180
Mironov, V. F. -1673
Mironov, V. F. -1759
Mironov, V. F. -1956
Mistryukov, É. A. - 866
Mistryukov, É. A. -1247
Mistryukov, É. A. -1249

Mistryukov, É. A. -1406
Mistryukov, É. A. -1695
Mistryukov, É. A. -1702
Mistryukov, É. A. -1905
Mistryukov, Z. A. - 574
Mistryukov, Z. A. - 578
Moiseev, I. I. -1261
Mokhir, I. A. - 779
Molotkovskii, Yul. G. -1959
Morozov, V. A. - 148
Muratova, G. L. -1563
Murin, A. N. -1334
Musaev, I. A. - 81
Musaev, I. A. - 277
Muslinkin, A. A. -1493

N

Nazarova, N. M. - 662
Nazarova, N. M. -1059
Nefedov, B. K. - 310
Nefedov, B. K. - 825
Nefedov, B. K. -1040
Nefedov, O. M. -1603
Neiman, M. B. -1624
Nenitszescu, C. D. -1018
Nepomnina, V. V. -1673
Nepomnina, V. V. -1759
Nepryakhina, A. V. -2060
Nesmeyanov, A. N. - 67
Nesmeyanov, A. N. - 237
Nesmeyanov, A. N. - 340
Nesmeyanov, A. N. - 403
Nesmeyanov, A. N. - 560
Nesmeyanov, A. N. - 564
Nesmeyanov, A. N. - 672
Nesmeyanov, A. N. - 678
Nesmeyanov, A. N. - 743
Nesmeyanov, A. N. -1161
Nesmeyanov, A. N. -1201
Nesmeyanov, A. N. -1350
Nesmeyanov, A. N. -1473
Nesmeyanov, A. N. -1477
Nesmeyanov, A. N. -1659
Nesmeyanov, A. N. -1850
Nesmeyanov, A. N. -1853
Nesmeyanov, A. N. -1963
Nesmeyanov, A. N. -2008
Nesmeyanov, A. N. -2098
Nesmeyanov, A. N. -2152
Nikiforov, G. A. - 151
Nikiforov, G. A. - 154
Nikishin, G. I. - 814
Nikishin, G. I. -1232
Nikishin, G. I. -1384
Nikishin, G. I. -1925
Nikitenkov, V. E. - 407
Nikitenkov, V. E. -1595
Nikitina, T. V. - 67
Nikolaev, A. F. -1236
Nikolaev, G. M. - 583
Nikolaeva, N. A. -1256
Nogina, O. V. - 403
Nogina, O. V. - 743
Nogina, O. V. -2008
Novikov, S. S. - 168
Novikov, S. S. - 303
Novikov, S. S. - 351
Novikov, S. S. - 437
Novikov, S. S. - 440
Novikov, S. S. - 482
Novikov, S. S. - 484
Novikov, S. S. - 599
Novikov, S. S. - 622
Novikov, S. S. - 627
Novikov, S. S. - 633
Novikov, S. S. - 640
Novikov, S. S. - 644
Novikov, S. S. - 963
Novikov, S. S. -1023
Novikov, S. S. -1062
Novikova, N. V. - 564
Novikova, N. V. - 678
Novikova, N. V. -1473

O

Odinets, V. A. -1507
Ogibin, Yu. N. -1232
Ogibin, Yu. N. -1384
Ogibina, T. Ya. - 445
Ogibina, T. Ya. -1423
Okhlobystin, O. Yu. -1942
Okhlobystin, O. Yu. -2114
Okhlobystin, O. Yu. -2115
Orestova, V. A. -1256
Orlov, Kh. Ya. - 607
Osipova, M. A. - 960
Osipova, M. A. -1161
Osipova, M. P. -2023
Ovchinnikov, Yu. A. - 353

P

Pailii, A. I. - 662
Panov, E. M. - 769
Panov, E. M. -2116
Pames, Z. N. - 123
Paushkin, Ya. M. - 282
Paushkin, Ya. M. - 607
Paushkin, Ya. M. -2060
Perevalova, É. G. - 67
Perevalova, É. G. -1850
Pervova, E. Ya. - 77
Petrov, A. D. - 257
Petrov, A. D. - 270
Petrov, A. D. - 814
Petrov, A. D. -1185
Petrov, A. D. -1232
Petrov, A. D. -1384
Petrov, A. D. -1603
Petrov, A. D. -1604
Petrov, A. D. -1872
Petrov, A. D. -1925
Petrov, A. D. -1956
Petrov, A. D. -2065
Petrov, Yu. I. - 537
Petrova, L. V. - 99
Petrova, L. V. -2110
Petrov, Al. A. - 158
Petukhov, V. A. - 818
Petukhov, V. A. -1215
Petukhov, V. A. -1752
Pivnitskii, K. K. - 999
Platonova, A. V. - 993
Plisko, E. A. -1396
Plotnikova, G. I. -1715
Pokrovskaya, I. E. -1010
Poktrovsaya, I. E. -1547
Pokrovskaya, I. E. -1720
Pokrovskaya, I. E. -1725
Pokrovskaya, I. E. -2049
Polezhaeva, N. A. -1877
Polezhaeva, N. A. -1884
Polikarpov, Yu. M. -1891
Polkovnikov, B. D. -1023
Polyakova, Z. P. - 792
Ponomarenko, V. A. -1639
Ponomarenko, V. A. -1993
Ponomarev, A. N. -1602
Popov, E. M. - 945
Popov, M. A. - 596
Popov, M. A. -1729
Poroshin, K. T. - 141
Poroshin, K. T. - 173
Poroshin, K. T. -1047
Povarov, Yu. M. -1410
Pozdnyak, N. A. - 299
Pozdnyak, N. A. - 429
Pozdnyak, N. A. -1014
Pozdnyak, N. A. -1074
Pozdnyakova, T. A. - 119
Pribytkova, N. A. - 922
Pribytkova, N. A. -1450
Prilezhaeva, E. N. -1468
Ptitsyna, O. A. - 241
Pushchevaya, K. S. - 257
Pushchevaya, K. S. -1185

Pyaivinen, É. A. -1396
Pyatakov, N. F. - 351
Pylaeva, E. N. - 178
Pytslin, E. E. - 72

R

Radicheva, M. A. - 3
Radushkevich, L. V. - 699
Radushkevich, L. V. - 911
Ravich, G. B. -1951
Reshetov, P. D. - 67
Reutov, O. A. - 237
Reutov, O. A. - 241
Reutov, O. A. -1123
Reutov, O. A. -1127
Reutov, O. A. -1328
Reutov, O. A. -1458
Reutov, O. A. -1483
Reutov, O. A. -1830
Reutov, O. A. -1863
Reutov, O. A. -1894
Reutov, O. A. -1900
Reutov, O. A. -1985
Reutov, O. A. -1989
Reutov, O. A. -2036
Rizpolozhenskii, N. I. -1493
Rodionov, A. N. -1857
Roginskii, S. Z. - 713
Roginskii, S. Z. -1110
Rogova, É. V. -1026
Rozhdestvenskaya, I. D. -1824
Rudenko, A. P. - 145
Rudenko, A. P. - 705
Rudenko, A. P. - 916
Rudenko, V. A. - 437
Rudenko, V. A. -1062
Rudenko, V. S. -1797
Rubinshtein, A. M. - 516
Rubinshtein, A. M. - 922
Rubinshtein, A. M. -1413
Rubinshtein, A. M. -1427
Rubinshtein, A. M. -1450
Rubinshtein, A. M. -1765
Rubinshtein, A. M. -2090
Rubinshtein, A. N. - 722
Ryashentseva, M. A. - 88
Ryashentseva, M. A. - 92
Ryashentseva, M. A. -1215
Ryashentseva, M. A. -1223
Ryashentseva, M. A. -1559
Rybin, L. V. -1201
Rybin, L. V. -1350
Rybin, L. V. -2013
Rybinskaya, M. I. -1350
Rybinskaya, M. I. -2013
Rybinskaya, N. I. -1201
Rzheznikov, V. M. -1789

S

Sadikov, G. G. -1953
Sagalovich, A. V. - 922
Samoilov, S. M. -1319
Samoilov, S. M. -1456
Sarakhov, A. I. - 368
Sarakhov, A. I. - 902
Sarakhov, A. I. -1293
Sardanashvili, N. M. - 81
Sardanashvili, N. H. - 277
Savchenko, E. P. -1613
Savchenko, E. P. -1619
Savel'eva, I. S. - 672
Savel'eva, I. S. -1161
Savel'eva, I. S. -2098
Savina, L. A. - 355
Schwecheimer, G. A. - 640
Segal', G. M. -1374
Sekina, V. N. -1211
Semenov, A. D. - 171
Serebryakov, É. P. -1005
Serpinskii, V. V. - 376
Serpinskii, V. V. - 509
Serpinskii, V. V. -1817
Setkina, V. N. - 355
Setkina, V. N. - 613
Setkina, V. N. - 617
Setkina, V. N. -1940
Severina, T. A. -1253
Severnyi, V. V. -1356
Severnyi, V. V. -1502
Severnyi, V. V. -1515
Severyi, V. V. -1666
Sevost'yanova, V. V. - 622
Shablya, A. V. -1117
Shakarashvili , T. S. - 292
Shapiro, E. S. - 477
Shapiro, É. S. -1423
Shapshinskaya, L. A. -2020
Sharf, V. Z. - 348
Shashkova, T. A. -1081
Shatalov, G. V. -2008
Shatkina, T. N. -1894
Shatkina, T. N. -1900
Shcheglova, A. P. - 392
Shcheglova, A. P. - 532
Shchegoleva, T. A. -1054
Shchegoleva, T. A. -1081
Shchekin, V. V. - 397
Shchukina, O. K. -1402
Shchukina, O. K. -1552
Shein, T. I. -1598
Sheludyakov, V. D. -1081
Shemyakin, M. M. - 329
Shemyakin, M. M. - 353
Shemyakin, M. M. - 677
Shemyakin, M. M. -1412
Shemyatenkova, V. T. - 164
Sheremeteva, T. V. -1566
Sheremeteva, T. V. -2093
Shevelev, S. A. - 303
Shilovtseva, L. S. -1850
Shishakov, N. A. - 205
Shishakov, N. A. -1144
Shishakov, N. A. -1953
Shkurina, T. H. - 935
Shkurina, T. N. - 445
Shkurina, T. N. -1468
Shlvapnikov, Yu. A. -1834
Shlyapintokh, V. Ya. - 198
Shlyapintokh, V. Ya. - 729
Shlyapochnikov, V. A. - 303
Shlyapochnikov, V. A. - 429
Shmonina, L. I. - 474
Shokina, V. V. -1361
Shokina, V. V. -1785
Shorygin, P. P. - 935
Shorygin, P. P. -1468
Shorygina, N. N. - 674
Shorygina, N. N. -1688
Shostakovskii, M. F. - 105
Shostakovskii, M. F. - 112
Shostakovskii, M. F. - 315
Shostakovskii, M. F. - 450
Shostakovskii, M. F. - 445
Shostakovskii, M. F. - 474
Shostakovskii, M. F. - 477
Shostakovskii, M. F. - 647
Shostakovskii, M. F. - 651
Shostakovskii, M. F. - 654
Shostakovskii, M. F. - 657
Shostakovskii, M. F. - 858
Shostakovskii, M. F. - 935
Shostakovskii, M. F. -1026
Shostakovskii, M. F. -1392
Shostakovskii, M. F. -1423
Shostakovskii, M. F. -1468
Shostakovskii, M. F. -1570
Shostakovskii, M. F. -1763
Shostakovskii, M. F. -1782
Shostakovskii, M. F. -1933
Shostakovskii, M. F. -2073
Shostakovskii, M. F. -2077
Shotakovskii, M. F. -1930
Shtemberg, R. - 126
Shuikin, N. I. - 286
Shuikin, N. I. - 299

Shuikin, N. I. - 334
Shuikin, N. I. - 429
Shuikin, N. I. - 596
Shuikin, N. I. - 599
Shuikin, N. I. - 603
Shuikin, N. I. - 788
Shuikin, N. I. - 792
Shuikin, N. I. - 797
Shuikin, N. I. -1010
Shuikin, N. I. -1014
Shuikin, N. I. -1074
Shuikin, N. I. -1223
Shuikin, N. I. -1413
Shuikin, N. I. -1415
Shuikin, N. I. -1544
Shuikin, N. I. -1547
Shuikin, N. I. -1720
Shuikin, N. I. -1725
Shuikin, N. I. -1729
Shuikin, N. I. -1914
Shuikin, N. I. -1918
Shuikin, N. I. -1946
Shuikin, N. I. -2049
Shuikin, N. I. -2052
Shuikin, N. N. - 292
Shvekhgeimer, G. A. - 168
Shvekhgeimer, G. A. - 351
Shvekhgeimer, G. A. - 482
Shvekhgeimer, G. A. - 484
Shvetsov, N. I. - 263
Shvetsov, N. I. - 268
Shvetsov, N. I. - 779
Sidel'kovskaya, F. P. - 112
Sidel'kovskaya, F. P. - 445
Sidel'kovskaya, F. P. -1026
Sidel'kovskaya, F. P. -1423
Sidel'kovskaya, F. P. -2077
Silaev, Yu. V. - 151
Simonov, A. P. - 772
Simonov, A. P. - 982
Simukova, N. A. - 67
Simanov, Yu. P. - 383
Sinyakov, Yu. I. -1410
Skorobogatov, G. A. -1644
Sladkova, T. A. - 132
Sladkova, T. A. -1598
Sladkova, T. A. -1872
Slinkin, A. A. -1413
Slinkin, A. A. -2090
Slovetskii, V. I. - 168
Slovetskii, V. I. - 303
Slovetskii, V. I. - 627
Slovetskii, V. I. - 633
Slovokhotova, N. A. - 55
Slovokhotova, N. A. - 62
Smirnov, V. S. - 670
Smirnov, V. S. -1227
Smirnov, V. S. -1556
Smirnova, A. V. -1678
Smirnova, É. N. -1344
Smirnova, É. N. -1338
Sokolov, V. I. -1123
Sokolov, V. I. -1127
Sokolov, V. I. -1328
Sokolov, V. I. -1458
Sokolova, L. V. - 869
Sokolova, N. P. - 383
Sokolova, N. P. -1442
Sokolova, N. P. -1447
Sokol'skii, G. A. - 569
Sokol'skii, G. A. - 572
Sokol'skii, G. A. - 752
Sokol'skii, G. A. - 972
Sokol'skii, G. A. - 975
Sokol'skii, G. A. -1367
Sokol'skii, G. A. -1499
Somov, G. V. -1925
Sorokin, O. I. - 424
Sorokina, M. F. - 930
Sovetova, L. S. -1587
Spitsyn, Vikt. I. - 3
Spitsyn, Vikt. I. - 521
Stankevich, I. V. -2112
Stanko, V. I. -1936
Stanko, V. I. -1938
Stanko, V. I. -1942
Stegner, G. - 705
Stepanov, V. M. -1563
Stepanova, N. B. - 141
Sterligov, O. D. -1344
Sterin, Kh. E. -1338
Sterin, Kh. E. -1344
Stolyarova, L. G. -1468
Stolyarova, T. Yu. -1566
Stradyn', Ya. P. -2095
Strel'tsova, I. N. - 228
Struchkov, Yu. T. - 228
Strunik, B. N. -2114
Strunin, B. N. -2115
Sultanov, R. -1872
Suvorov, N. N. -869
Syrkin, Ya. K. -1261
Syrkin, Ya. K. -1426
Syrkin, Ya. K. -1778

T

Taits, S. Z. -1589
Talalaeva, T. V. - 772
Talalaeva, T. V. - 982
Talalaeva, T. V. - 985
Talalaeva, T. V. -1857
Tal'roze, V. L. -1428
Tal'roze, V. L. -1602
Tartakovskii, V. A. - 963
Tedoradze, G. A. -1259
Tenisheva, T. F. - 894
Terenin, A. N. -1117
T'ien Hsing-hua - 788
Timofeev, D. P. -1105
Timofeev, D. P. -1438
Timofeeva, E. A. - 603
Timofeeva, E. A. - 797
Timofeeva, E. A. -1227
Titov, Yu. A. -1083
Tolstikova, N. G. - 410
Tolstikova, N. G. - 419
Tolstikova, N. G. -2032
Tolstopyatova, A. A. - 31
Tolstopyatova, A. A. - 37
Tolstopyatova, A. A. - 194
Tolstopyatova, A. A. - 537
Tomashov, N. D. - 215
Topchiev, A. V. - 81
Topchiev, A. V. - 277
Topchiev, A. V. - 282
Topchiev, A. V. - 588
Topchiev, A. V. - 801
Topchiev, A. V. -2060
Torgov, I. V. - 993
Torgov, I. V. - 999
Torgov, I. V. -1080
Torgov, I. V. -1682
Torgov, I. V. -1789
Toropov, N. A. - 497
Toropov, N. A. - 502
Toropov, N. A. - 682
Toropov, N. A. -1271
Toropov, N. A. -1276
Torsueva, E. S. -1834
Tsao -1168
Tsedilina, A. L. - 158
Tsentsiper, A. B. - 493
Tsvetkov, E. N. -1770
Tulupova, E. D. - 792
Tulupova, E. D. -1918
Tutorskaya, F. B. -1076
Tyuleneva, V. V. - 77
Tyun'kina, N. I. -1338

U

Ukholin, S. A. -1338
Ukholin, S. A. -1344
Ul'yanov, A. I. - 359
Ul'yanov, A. I. - 882
Ul'yanov, A. I. -1592

Unkovskii, B. V. - 779
Urmancheev, F. A. - 94
Urmancheev, F. A. -1218
Urmancheev, F. A. -1732
Urmancheev, F. A. -1922
Ushakov, S. N. - 831
Ushakov, S. N. -1236
Ushakova, T. M. - 105
Ushakova, T. M. - 657
Ushakova, T. M. -2073
Uvarova, N. I. - 315
Uvarova, N. I. - 320

V

Valueva, Z. P. -1659
Vasil'ev, A. F. - 784
Vasil'ev, L. S. -1962
Vasil'ev, R. F. - 198
Vasil'eva, E. D. -1710
Vasil'eva, E. I. - 969
Vasil'eva, T. V. - 952
Vasilevskaya, G. K. - 334
Vaver, V. A. - 677
Vdovin, V. M. - 257
Vdovin, V. M. -1185
Vdovin, V. M. -1872
Velichko, F. K. - 47
Vereshchinskii, I. V. - 521
Vereshchinskii, I. V. -1070
Viktorova, E. A. -1010
Viktorova, E. A. -1415
Viktorova, E. A. -1544
Viktorova, E. A. -1547
Viktorova, E. A. -1720
Viktorova, E. A. -1725
Viktorova, E. A. -1914
Viktorova, E. A. -2049
Vinogradova, L. P. - 143
Vinogradova, L. P. - 784
Vinogradova, L. P. -1380
Vinogradova, L. P. -1529
Vinogradova, V. S. -1877
Vinogradova, V. S. -1884
Vinogradova, L. P. -1911
Vishnyakova, M. M. - 368
Vishnyakova, M. M. -1293
Vitt, S. V. -1940
Vlasova, N. D. - 588
Vol'kenau, N. A. - 340
Vol'kenshtein, Yu. B. -1752
Volkov, A. N. -1930
Volkova, L. M. -1868
Volkova, L. M. -1962
Vol'nov, I. I. - 493
Vol'pin, M. E. -1262
Vorob'ev, V. D. - 814
Voronkov, M. G. - 164
Voronkov, M. G. -1573
Voznesenskaya, I. I. - 532

Y

Yudina, K. S. -1891
Yufit, S. S. -1420
Yufit, S. S. -1534
Yufit, S. S. -2040
Yakerson, V. I. -1427
Yakerson, V. I. -2090
Yakovlev, I. P. -1040
Yakovlev, I. P. -1715
Yanat'eva, O. K. - 166
Yang Che-min -1570
Yanovskaya, L. A. -1706
Yanovskaya, L. A. -1538

Z

Zabolotnaya, M. M. - 916
Zaborenko, K. B. - 3
Zabrodina, K. S. - 160
Zabrodina, K. S. -2088
Zaitseva, N. A. - 769
Zakharkin, L. I. - 139
Zakharkin, L. I. - 336
Zakharkin, L. I. - 343
Zakharkin, L. I. - 355
Zakharkin, L. I. -1057
Zakharkin, L. I. -1768
Zakharkin, L. I. -1784
Zakharkin, L. I. -1936
Zakharkin, L. I. -1938
Zakharkin, L. I. -1942
Zakharkin, L. I. -2103
Zakharkin, L. I. -2105
Zakharkin, L. I. -2114
Zakharkin, L. I. -2115
Zakharov, B. A. - 858
Zakharycheva, I. I. -1447
Zaverina, E. D. - 14
Zaverina, E. D. - 24
Zaverina, E. D. - 182
Zaverina, E. D. - 368
Zaverina, E. D. - 902
Zaverina, E. D. -1286
Zaverina, E. D. -1293
Zavin, B. G. -1356
Zavin, B. G. -1502
Zav'yalov, S. I. - 143
Zav'yalov, S. I. - 490
Zav'yalov, S. I. - 784
Zav'yalov, S. I. -1380
Zav'yalov, S. I. -1529
Zav'yalov, S. I. -1911
Zav'yalov, S. I. -2042
Zelenskaya, M. G. - 112
Zelenskaya, M. G. - 445
Zemlyanskii N. N. -2116
Zhdanov, A. A. -1172
Zhdanov, A. A. -1507
Zhigareva, G. G. - 343
Zhukova, I. F. -1180
Zhukovskaya, E. G. - 368
Zhukovskaya, E. G. -1293
Zikherman, K. Kh. -1392
Zil'berman, E. N. -1598
Zimin, A. V. - 772
Zimin, A. V. - 982
Zimin, A. V. - 985
Zoroastrova, V. M. - 43
Zoroastrova, V. M. - 940
Zoroastrova, V. M. -2023
Zotova, S. V. -1344
Zueva, G. Ya. -1639
Zueva, G. Ya. -1993

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 1 January, 1961

CONTENTS

	PAGE	RUSS. PAGE
Mikhail Mikhailovich	1	2
Inorganic and Analytical Chemistry. Application of the Emanation Method to the Study of Conversions of Heteropoly Compounds. Vikt. I. Spitsyn, K. B. Zaborenko, M. A. Radicheva, and A. M. Babeshkin	3	5
Systems with Concentrated Hydrogen Peroxide. Communication 22. 20 and 0° Isotherms of the Ternary System $Cd(OH)_2-H_2O_2-H_2O$. L. V. Ladeinova, L. G. Lozhkina, and A. M. Chernysheva	9	12
A Study of the Microporous Structure of Activated Charcoals. Communication 1. Activated Charcoals from Phenolaldehyde Resin. M. M. Dubinin, E. D. Zaverina, L. S. Ivanova, A. T. Kaverov, and V. I. Kasatochkin	14	17
A Study of the Microporous Structure of Activated Charcoals. Communication 2. Activated charcoals from Polyvinylidene Chloride. M. M. Dubinin, E. D. Zaverina, A. T. Kaverov, and V. I. Kasatochkin	24	29
Kinetics of Dehydrogenation and Dehydration of Isopropyl Alcohol on Titanium Dioxide. A. A. Tolstopyatova, I. R. Konenko, and A. A. Balandin	31	38
Effect of Method of Preparation on the Catalytic Properties of Titanium Dioxide in Reactions of Ethyl and Isopropyl Alcohol and Cyclohexane. A. A. Balandin, I. R. Konenko, and A. A. Tolstopyatova	37	45
Esters of Phosphoric and Thiophosphoric Acids Containing Heterocyclic Radicals. Communication 3. Compounds with Tetrahydrofurfuryl Radicals. B. A. Arbuzov and V. M. Zoroastrova	43	51
Synthesis and Properties of β-Haloallyl Compounds of Mercury. R. Kh. Freidlina and F. K. Velichko	47	55
The Condensation Productions of Chloral and the Amides of Organophosphoric Acids. P. I. Alimov	52	61
Investigation in the Field of Unsaturated Phosphinic Acids. Part 22. Addition of Phosphorus Pentachloride to Isopropenylacetylene. K. N. Anisimov, G. M. Kunitskaya, and N. A. Slovokhotova	55	64
Infrared Spectra of Some Derivatives of Unsaturated Phosphinic Acids. N. A. Slovokhotova, K. N. Anisimov, G. M. Kunitskaya, and N. E. Kolobova	62	71
The Reaction of Ferrocene Derivatives with Aryldiazoniums. É. G. Perevalova, N. A. Simukova, T. V. Nikitina, P. D. Reshetov, and A. N. Nesmeyanov	67	77
β-Lactams. Part IV. Synthesis of 3,3-Diphenylazetidinones-2. I. L. Knunyants, E. E. Pytslin, and N. P. Gambaryan	72	83
Addition Reactions of Fluoroolefins. Part. 14. Concerted Addition of Halogens and Mercury Salts. I. L. Knunyants, E. Ya. Pervova, and V. V. Tyuleneva	77	88

CONTENTS (continued)

	PAGE	RUSS. PAGE
On the Chemical Composition of Cracked Gasolines from Naphthenic Raw Material. Article 1. Combined Method of Investigation of the Detailed Group Chemical Composition of Cracked Gasoline. A. V. Topchiev, I. A. Musaev, E. Kh. Iskhakova, and N. M. Sardanashvili	81	94
Conversion of n-Hexane, Methylcyclopentane, and Cyclohexane on a Rhenium-Alumina Catalyst Treated with Hydrogen Sulfide. Kh. M. Minachev and M. A. Ryashentseva	88	103
Reformation of Gasoline on a Rhenium-Alumina Catalyst Treated with Hydrogen Sulfide, with the Object of Improving Its Octane Characteristics. Kh. M. Minachev and M. A. Ryashentseva	92	107
Determination of the Individual Hydrocarbon Content of Tatar Petroleums. Communication 4. Ligroin from Petroleum of the Romashkin Deposits. B. Le, R. I. Izmailov, F. A. Urmancheev, and I. P. Lipatova	94	109
Kishner Synthesis of Di-, Tri-, and Tetrasubstituted Cyclopropane Hydrocarbons. A. P. Meshcheryakov, L. V. Petrova, and V. G. Glukhovtsev.	99	114
Vinyl Compounds in Diene Synthesis. Communication 4. Comparative Characterization of the Dienophile Activity of Vinyl and Thiovinyl Ethers, and Optical Investigation of the Adducts Obtained. M. F. Shostakovskii, A. V. Bodanova, T. M. Ushakova, and B. V. Lopatin	105	120
Studies of the Lactones and Lactams. Report 17. A Study of the Dienophilic Activity of N-vinyl Lactams and the Vinyl Ether of N-(β-hydroxyethyl)pyrrolidone. F. P. Sidel'kovskaya, M. G. Zelenskaya, and M. F. Shostakovskii.	112	128
Synthesis of Saturated Primary-Secondary γ-Glycols. V. G. Bukharov and T. E. Pozdnyakova	119	135
Reactions of Cyclopentadienylides. D. N. Kursanov, N. K. Baranetskaya, and Z. N. Parnes	123	140
Synthesis of α-Amino Ketones. E. Chiorénesku, L. Bukhen-Byrlédryanu, and R. Shternberg	126	144
Synthesis of Cyclic α-Amino Ketones. E. Chiorénesku and L. Bukhen-Byrlédryanu	130	149
Selective Reduction of Adiponitrile to ε-Aminocapronitrile on a Nickel Boride Catalyst. L. Kh. Freidlin and T. A. Sladkova	132	151
BRIEF COMMUNICATIONS		
The Detonation Parameters of TG 68/32 Heterogeneous Charges. A. N. Dremin and G. A. Adadurov	137	157
Synthesis of ω-Aminododecanoic Acid. L. I. Zakharkin and V. V. Korneva.	139	159
Polycondensation of the Ethyl Ester of Glycine in the Presence of Ethyl Alcohol. N. B. Stepanova, Yu. I. Khurgin, and K. T. Poroshin	141	160
Application of the Method of Chromatographic Plates to β-Dicarbonyl Compounds. M. Barbier, L. P. Vinogradova, and S. I. Zav'yalov	143	162
Factors which Bring About a Change in the Mechanisms of Carbon Formation in Connection with the Decomposition of Hydrocarbons. A. P. Rudenko, A. A. Balandin, and G. Yu. Chueva	145	164
Infrared Absorption Spectra of Mono- and Diacylated Thiophene Homologs. V. P. Litvinov and V. A. Morozov	148	166
Inhibitors of Free-Radical Reactions. K. M. Kyumaev, G. A. Nikiforov, and Yu. V. Silaev	151	168

CONTENTS (continued)

	PAGE	RUSS. PAGE
The Synthesis of 3,5-Di-tert-butyl-4-hydroxybenzylamine and 3,5-Di-(1',1'-dimethylpropyl)-4-hydroxybenzylamine. G. A. Nikiforov and K. M. Dyumaev .	154	171
The Identification of $\alpha,\alpha,\alpha,\omega$-Tetrachloroalkanes and α,β-Unsaturated α,α,ω-Trichloroalkenes by the Picrates of Their Isothiuronium Derivatives. R. Kh. Freidlina and B. V. Kopylova	156	172
Some Peculiarities in the Liquid Phase Dehydrogenation of Bicyclic High Molecular Weight Hydrocarbons. Al. A. Petrov, A. L. Tsedilina, and K. A. Karasharli	158	174
The Microdetermination of Primary and Secondary Saturated Nitrocompounds. V. A. Klimova and K. S. Zabrodina.....	160	176
Telomerization of Ethylene and Carbon Tetrachloride or Chloroform in the Presence of the Hexacarbonyls of Chromium, Molybdenum, and Tungsten. R. Kh. Freidlina and A. B. Belyavskii	162	177
Gasometric Determination of Alkyl Radicals in Polyalkylsiloxanes and Silicofunctional Organic Silicon Compounds. M. G. Voronkov and V. T. Shemyatenkova	164	178
The Metastable Equilibrium in the System $CaCO_3-MgCO_3-H_2O$. O. K. Yanat'eva .	166	180
The Effect of Configuration of Nitrodienophiles $R-CH=CH-NO_2$ on Their Condensation with Cyclopentadiene. A. A. Dudunskaya, G. A. Shvekhgeimer, S. S. Novikov, and V. I. Slovetskii	168	182
The Determination of Microgram Quantities of Amino Acids in Natural Waters. A. D. Semenov, I. N. Ivleva, and V. G. Datsko	171	184
The Synthesis of Dibenzylpeptides through the p-Nitrophenyl Esters of Dibenzylamino Acids. Vyach. I. Maksimov and K. T. Poroshin.....	173	186

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR
Division of Chemical Science

Number 2 February, 1961

CONTENTS

	PAGE	RUSS. PAGE
Academician Nikolai Dmitrievich Zelinskii (Centennial of his birth)	175	193
An Investigation of the Equilibrium of the Ternary System of Metallides Ni_3Nb–Ni_3Ti–Ni_3Ta. I. I. Kornilov and E. N. Pylaeva	178	197
A Study of the Nature of the Microporous Structure of Active Carbons. Communication 3. Active Carbons from Different Carbonized Materials. M. M. Dubinin and E. D. Zaverina	182	201
The Adsorption and Heat of Adsorption of Normal Alcohols on Graphitized Carbon Black. N. N. Avgul', G. I. Berezin, A. V. Kiselev, and I. A. Lygina	186	205
The Bonding Energies of the Atoms of Reacting Organic Substances with the Catalytically Active Centers of Titanium Dioxide. A. A. Tolstopyatova, A. A. Balandin, and I. R. Konenko	194	214
The Mechanism of the Initiating Action of Nitrogen Dioxide in the Oxidation of 2,7-Dimethyloctane by Molecular Oxygen. R. F. Vasil'ev, V. Ya. Shlyapintokh, and N. M. Émanuél'	198	218
Mechanism of the Reaction of Platinum with Oxygen at Temperatures Up to 300°. U. A. Asanov and N. A. Shishakov	205	225
Homogeneous Catalysis in Gas-Phase Oxidation of Hydrocarbons. Communication 2. Effect of Nitromethane on the Oxidation of Methane. N. S. Enikolopyan and G. P. Konareva	210	230
Controlling Factors in the Protection of Metals from Corrosion. N. D. Tomashov	215	236
Effect of Hydroxide Precipitation Conditions on the Mechanical Strength of Alumina. Ya. R. Katsobashvili, N. S. Kurkova, V. S. Likhobabenko, É. A. Levitskii, T. N. Kuz'mina, V. F. Kukhticheva, and F. A. Masolova	223	245
Steric Hindrance and Conformation of Molecules. Communication 4. Crystal Structure of Tetrabromo-m-xylene and Tetrabromo-o-xylene. I. N. Strel'tsova, and Yu. T. Struchkov	228	250
Several Reactions of Methyl-β, β-Dichlorovinyl Ketone. A. N. Nesmeyanov, O. A. Reutov, and A. S. Gudkova	237	260
Synthesis of Organoantimony Compounds Via Diaryliodonium Salts. O. A. Ptitsyna, O. A. Reutov, and G. Értel'	241	265
Organophosphorus Monomers. Communication 2. α-Chloro- and α-Bromovinylphosphinic Acids and their Derivatives. T. Ya. Medved' and M. I. Kabachnik	246	270
An Investigation in the Field of the Unsaturated Phosphonic Acids. Communication 23. Addition of Phosphorus Pentachloride to Ethynylcyclohexene -1. K. N. Anisimov, and G. M. Kunitskaya	250	274
An Investigation in the Field of the Derivatives of Unsaturated Phosphinic Acids. Communication 24. Reaction of Phosphorus Pentachloride with Alkoxyacetylenes. K. N. Anisimov and B. V. Kopylova	253	277
Organosilicon Compounds with Hydrocarbon Bridges between Silicon Atoms. Communication 1. Reaction of 1,2-Disilylethanes with Metal Halides. V. M. Vdovin, K. S. Pushchevaya, and A. D. Petrov	257	281

CONTENTS (continued)

	PAGE	RUSS. PAGE
Stereochemistry of Heterocyclic Compounds. Communication 2. Geometric Isomers of 1-Cyclohexyl- and 1-Phenyl-2,5-dimethyl-4-phenylpiperidols-4. V. F. Kucherov and N. I. Shvetsov	263	287
Synthesis of Four Geometrical Isomers of 1,2,3-Trimethyl-4-phenylpiperidol-4. É. A. Mastryukov and N. I. Shvetsov	268	292
Synthesis and Properties of Di- and Triphenylalkanes. Communication 4. Selective Hydrogenation of Di- and Triphenylalkanes over PtO_2. M. A. Chel'tsova, A. D. Petrov, and V. I. Grigos	270	294
Chemical Composition of Cracked Gasolines from Naphthenic Crude. Communication 2. Investigation of Individual Hydrocarbon Composition of Cracked Gasolines from Surakhan Select Crude. A. V. Topchiev, I. A. Musaev, É. Kh. Iskhakova, N. M. Sardanashvili, A. N. Kislinskii, and G. D. Gal'pern	277	302
Effectiveness of Various Catalysts in Alkylating Phenol with Isobutene. A. V. Topchiev, M. V. Kurashev, and Ya. M. Paushkin	282	307
Contact Catalytic Conversions of C_{11}—C_{18} n-Alkanes under Hydrogen Pressure in a Flow System. N. G. Bekauri and N. I. Shuikin	286	311
Conversions of n-Nonadecane and Eicosane in a Flow System over Metal Oxide Catalysts under Hydrogen Pressure. N. G. Bekauri, N. N. Shuikin, and T. S. Shakarashvili	292	318
The Catalytic Alkylation of Tetralin. Report 3. The Alkylation of Tetralin by Nonene-1 and N-Nonyl Alcohol. N. I. Shuikin and N. A. Pozdnyak	299	329
Molecular Absorption Spectra of Nitroalkanes. V. I. Slovetskii, V. A. Shlyapochnikov, S. A. Shevelev, A. A. Fainzil'berg, and S. S. Novikov	303	330
Catalytic Polymerization of Olefins. Communication 12. Polymerization of Isobutylene in the Presence of Kisatibi Kieselguhr. Ya. T. Éidus and B. K. Nefedov	310	338
Synthesis and Some Properties of Vinyl Bornyl Ether. M. F. Shostakovskii and N. I. Uvarova	315	343
Some Conversions of Vinyl Menthyl Ether. N. I. Uvarova	320	348
An Investigation in the Field of Chemical Changes of Unsaturated and High-Molecular Compounds. Communication 16. Copolymerization of Vinyl Ethers and Vinyl Esters. A. M. Khomutov	324	352
Concerning Intramolecular Transacetalization with the Formation of 1,3-Dioxanes. L. D. Bergel'son, É. V. Dyatlovitskaya, and M. M. Shemyakin	329	358
Concerning the Structure of the Amination Products of Nicotine. Ya. L. Gol'dfarb and S. N. Godovikova	331	360
The Catalytic Synthesis of 1,5-Diketones. N. I. Shuikin, I. F. Bel'skii, and G. K. Vasilevskaya	334	363
Dialkylaluminum Derivatives of Saturated and Unsaturated Acids. L. I. Zakharkin, G. S. Kolesnikov, S. L. Davydova, V. V. Gavrilenko, and A. A. Kamyshova	336	364
The Reduction of Cyclohexanone on Skeletal Zinc Catalyst under Pressure. L. Kh. Freidlin and V. I. Gorshkov	338	366
Some Carbonylchromiumarenes. A. N. Nesmeyanov and N. A. Vol'kenau	340	367
Reaction of Triisobutylboron and Diborane with Styrene. L. I. Zakharkin, and G. G. Zhigareva	343	369
Synthesis and Properties of B-Tri-n-butylmercaptoborazoles. B. M. Mikhailov and A. F. Galkin	345	371

CONTENTS (continued)

	PAGE	RUSS. PAGE
Study of the Stepwise Dehydration of 1,6-Hexanediol on Tricalcium Phosphate Catalyst. L. K. Freidlin, V. Z. Sharf, and N. S. Andreev	348	373
The Reaction of β-Nitro Alcohols with Ethoxyacetylene. S. S. Novikov, G. A. Shvekhgeimer, and N. F. Pyatakov	351	375
LETTERS TO THE EDITOR		
A New Reaction of Halolactones. Yu. A. Arbuzov, M. N. Kolosov, Yu. A. Ovchinnikov, and M. M. Shemyakin	353	377
Synthesis of Simple Enolates of Aluminum. L. I. Zakharkin and L. A. Savina	355	378
The Ionization of Tert-Alkyl Trifluoroacetates in Anhydrous Trifluoroacetic Acid. V. N. Setkina and D. N. Kursanov	355	378
CHRONICLE		
General Meeting of the Chemical Sciences Sections of the Academy of Sciences of the USSR, October 27-28, 1960	356	379

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR.

Division of Chemical Science

Number 3 March, 1961

CONTENTS

	PAGE	RUSS. PAGE
INORGANIC AND ANALYTICAL CHEMISTRY		
Investigation of the System $Tl_2SO_4 - Na_2S - H_2O$ (20 and 25°) by Means of Solubility, Analysis of the Solid Phase, and Apparent Volume of the Precipitate. A. I. Ul'yanov	359	385
PHYSICAL CHEMISTRY		
Kinetics of Thermal Decomposition of Solids. Communication 2. Thermal Decomposition of Silver Carbonate. O. Kadlets and M. M Dubinin	363	390
Adsorption Properties and Secondary Porous Structure of Adsorbents with a Molecular Sieve Action. Communication 1. Industrial Samples of Synthetic Zeolites. M. M. Dubinin, M. M. Vishnyakova, E. D. Zaverina, E. G. Zhukovskaya, E. A. Leont'ev, V. M. Luk'yanovich, and A. I. Sarakhov	368	396
Properties of Surface Solutions and Surface Heterogeneity. B. P. Bering and V. V. Serpinskii	376	406
"The Pentoxides of Niobium and Tantalum as Dehydration Catalysts". A. A. Balandin, N. P. Sokolova, and Yu. P. Simanov	383	415
"Regularities in the Catalytic Dehydrogenation of Primary and Secondary Alcohols". O. K. Bogdanova, A. A. Balandin, and A. P. Shcheglova	392	425
"Chemical Correspondence in Heterogeneous Catalysis". M. A. Landau and V. V. Shchekin	397	430
ORGANIC AND BIOLOGICAL CHEMISTRY		
Synthesis of Dialkoxy (or Aryloxy) Titanium Oxides by the Transesterification of Dipropoxytitanium Oxide. A. N. Nesmeyanov, O. V. Nogina, and V. A. Dubovitskii	403	437
Synthesis of Organosilicon Compounds Containing Phenylenesiloxane Molecular Chains. K. A. Andrianov and V. E. Nikitenkov	407	441
Spectroscopic Investigation of the Effect of a Silicon Atom on Double Bonds in Organosilicon Molecules. Yu. P. Egorov, L. A. Leites, N. G. Tolstikova, and E. A. Chernyshev	410	445
Hammett Constants of Some (Trialkylsilyl) Alkyl Groups. E. A. Chernyshev and N. G. Tolstikova	419	455
Synthetic Anesthetics. Communication 33. 1,3,5-Trimethyl-4-Piperidone and Some of Its Derivatives. O. I. Sorokin	424	460
Catalytic Alkylation of Tetralin. Communication 4. Determination of the Structures of Alkyltetralins with the Aid of Infrared Spectroscopy. N. I. Shuikin, V. A. Shlyapochnikov, N. A. Pozdnyak, and B. L. Lebedev	429	466
Amination of Butyl Alcohol Over Iron Catalysts in Presence of Hydrogen Under Pressure. Yu. B. Kagan, A. N. Bashkirov, and G. A. Kliger	432	468

CONTENTS (continued)

	PAGE	RUSS. PAGE
Synthesis of Some Derivatives of 1-Benzyl-1H-1,2,3-Triazole. S. S. Novikov, V. M. Brushnikina, and V. A. Rudenko	437	474
Reaction of N_2O_4 with Organic Compounds. Communication 6. α-Nitro-α-Nitrosotoluenes and the Mechanism of the Reaction between N_2O_4 and Aromatic Compounds Containing the aci-Nitro or Hydroxyimino Group in the Side Chain. L. I. Khmel'nitskii, S. S. Novikov, and O. V. Lebedev	440	477
Lactones and Lactams. Communication 18. Reaction of N-Vinyl Lactams with Hydrogen Chloride and Alcohols. M. F. Shostakovskii, F. P. Sidel'kovskaya, M. G. Zelenskaya, T. N. Shkurina, and T. Ya. Ogibina	445	482
Reactions of Unsaturated and Macromolecular Compounds. Communication 17. Synthesis of Polymers and Copolymers of Dialkylbis(3-Methyl-3-Buten-1-Ynyl) Silanes. M. F. Shostakovskii, A. M. Khomutov, R. I. Baikova, and L. A. Kayutenko	450	488
Homogeneous Destructive Hydrogenation of Propyl- and Isopropyl-Phenols in Presence of Hydrogen Under Pressure. M. G. Gonikberg and Li Kuang-nien	454	491
Synthesis of Alkyl-α,α-Dimethylcyclopropanemethanols and Alkylcyclopropyl Methyl Ketones. A. P. Meshcheryakov and I. E. Dolgii	458	496
Synthesis of Bifunctional Derivatives from 2,5-Dimethylthiophene. Communication 2. Action of Amines of 3,4-Bischloromethyl-2,5-Dimethylthiophene. Ya. L. Gol'dfarb and M. S. Kondakova	463	501
Raman-Spectrum Investigation of the Structures of Some 1,2,3-Substituted 1,3-Butadienes. M. I. Batuev, L. I. Shmonina, A. D. Matveeva, and M. F. Shostakovskii	474	513
"Synthesis of the Vinyl Ester of Phthalylglycine and Some of Its Transformations". M. F. Shostakovskii and E. S. Shapiro	477	517
"Oxidation of Dialcoholcellulose with Nitrogen Oxides". N. Ya. Lenshina, V. S. Ivanova, and V. I. Ivanov	479	519
"Condensation of Piperylene with Nitroolefins". A. A. Dudinskaya, G. A. Shvekhgeimer, and S. S. Novikov	482	522
"Condensation of Butadiene with Nitroolefins". A. A. Dudinskaya, G. A. Shvekhgeimer, and S. S. Novikov	484	524
"Catalytic Dehydrocyclization of Diethylamine with the Formation of a Five-Membered Heterocyclic Ring". A. L. Liberman, O. V. Bragin, and B. A. Kazanskii	486	525
"Radiolytic Oxidation of Propylene with Oxygen". B. M. Mikhailov and V. G. Kiselev	488	527
"A New Way of Synthesizing Steroids". S. I. Zav'yalov, G. V. Kondrat'eva, and L. F. Kudryavtseva	490	529
LETTERS TO THE EDITOR		
"Synthesis of Tagged Hydrogen Peroxide from Heavy-Water Vapor by Subjecting the Latter to the Action of a Glow Discharge". I. I. Vol'nov, A. B. Tsentsiper, and V. N. Chamova	493	531

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 4 April, 1961

CONTENTS

	PAGE	RUSS. PAGE
Dear Boris Aleksandrovich!	496	537
INORGANIC AND ANALYTICAL CHEMISTRY		
Silicates of the Rare Earth Elements. Communication 2. Phase Diagram of the Binary System Gadolinium Oxide–Silica. N. A. Toropov, F. Ya. Galakhov, and S. F. Konovalova	497	539
Silicates of the Rare Earth Elements. Communication 3. Phase Diagram of the Binary System Yttrium Oxide–Silica. N. A. Toropov and I. A. Bondar	502	544
Adsorption of Mixtures of Ethylene and Carbon Dioxide on Carbon Black. B. P. Bering, O. A. Likhacheva, and V. V. Serpinskii	509	551
The Texture and Adsorptive Properties of Chromic Oxide and Hydroxide. Yu. A. Él'tekov, T. R. Bruera, and A. M. Rubinshtein	516	560
On the Influence of the Radioactive Radiation of a Solid Body on Its Catalytic Properties. A. A. Balandin, Vikt. I. Spitsyn, N. P. Dobrosel'skaya, I. E. Mikhailenko, I. V. Vereshchinskii, and P. Ya. Glazunov	521	565
Mechanism of Contact Conversions of Certain Organic Substances in the Presence of α-Iron. A. I. Kukina	526	571
Catalytic Dehydrogenation of n-Pentenes. O. K. Bogdanova, A. P. Shcheglova, A. A. Balandin, and I. I. Voznesenskaya	532	578
Kinetics of Dehydrogenation and Dehydration of Alcohols and Dehydrogenation of Hydrocarbons on WS_2 and MoS_2 Catalysts. A. A. Tolstopyatova, A. A. Balandin, V. Kh. Matyushenko, and Yu. I. Petrov	537	583
Kinetics and Mechanism of the Reaction of the CH_2OH Radical with O_2 Molecules. L. I. Avramenko and R. V. Kolesnikova	545	591
Rate Constant and Mechanism of the Reaction of Atomic Oxygen with Methyl Alcohol. L. I. Avramenko, R. V. Kolesnikova, and N. L. Kuznetsova	552	599
ORGANIC AND BIOLOGICAL CHEMISTRY		
Phosphorus-Organic Monomers. M. I. Kabachnik and T. Ya. Medved'	556	604
A New Method of Obtaining Tetraacyloxy Derivatives of Zirconium. E. M. Brainina, R. Kh. Freidlina, and A. N. Nesmeyanov	560	608
Propenyl Stereoisomers of Tri- and Pentavalent Antimony. A. N. Nesmeyanov, A. E. Borisov, and N. V. Novikova	564	612
Fluorine-Containing β-Sultones. Communication 5. Reaction of Tetrafluoroethane-β-pyrosultone with Alcohols. G. A. Sokol'skii, M. A. Dmitriev, and I. L. Knunyants	569	617
Fluorine-Containing β-Sultones. Communication 6. Sulfofluoride Monofluoroacetic Acid. G. A. Sokol'skii, M. A. Dmitriev, and I. L. Knunyants	572	621
Synthesis and Spatial Configuration of Certain 1-Methyl-4-phenyl-4-piperidols. Z. A. Mistryukov	574	623

CONTENTS (continued)

	PAGE	RUSS. PAGE
Stereochemistry of Heterocyclic Compounds. Communication 4. Esterification Reaction and Stereochemic Structure of Certain 4-Phenyl-4-piperidols. Z. A. Mistryukov and V. F. Kucherov	578	627
Synthesis and Transformations of Unsaturated Carboxylic Acids. Communication 2. A New Method of Synthesizing Unsaturated γ-Keto Acids. V. F. Kucherov and G. M. Nikolaev	583	632
Dimethylation and Isomerization of Pseudocumene on Aluminosilicates. G. M. Mamedaliev, A. V. Topchiev, N. D. Vlasova, and G. N. Anikina	588	637
Catalytic Synthesis of Nitriles. Communication 4. Cyanation of Allyl Alcohol with Ammonia. M. A. Popov and V. I. Shuikin	596	645
The Catalytic Amination of Alcohols. F. V. Bel'chev, N. I. Shuikin, and S. S. Novikov	599	649
Dehydration of n-Alkanes on the Catalyst K-5. N. I. Shuikin, E. A. Timofeeva, and V. M. Kleimenova	603	653
The Isomerization of Higher n-Paraffines $C_{15}-C_{18}$. Ya. M. Paushkin and Kh. Ya. Orlov	607	657
The Reaction of Isotopic Exchange of Hydrogen with Alkyl Halides. II. Hydrogen Exchange with Tertiary Alkyl Chlorides in Anhydrous Acetic Acid in the Presence of Lewis Acids. D. N. Kursanov, E. V. Bykova, and V. N. Setkina	613	664
The Reaction of Isotopic Exchange of Hydrogen with Alkyl Halides. III. The Role of Lewis Acids in Reactions of Hydrogen Exchange by Tertiary Alkyl Chlorides. V. N. Setkina and D. N. Kursanov	617	668
The Preparation and Quantitative Determination of α-Halogen Substituted Nitrocompounds. S. S. Novikov, A. A. Fainzil'berg, V. I. Gulevskaya, and V. V. Sevost'yanova	622	672
Reactions of N_2O_4 with Organic Compounds. VII. Syn- and Anti-Isomers of Aryl-Nitrolic Acids. L. I. Khmel'nitskii, O. V. Lebedev, V. I. Slovetskii, and S. S. Novikov	627	678
Molecular Absorption Spectra of α-Halonitroalkanes. V. I. Slovetskii, A. A. Fainzil'berg, V. I. Gulevskaya, and S. S. Novikov	633	683
Condensation of Cyclopentadiene with Mono- and Disubstituted Nitroolefins. S. S. Novikov, G. A. Schwecheimer, and A. A. Dudinskaya	640	690
Condensation of Nitroalkanes with Acetaldol. S. S. Novikov, M. S. Burmistrova, V. P. Gorelik, and Yu. G. Chkhikvadze	644	695
An Investigation of the Synthesis and Transformation of Unsaturated Silicon-Containing Compounds. M. F. Shostakovskii, N. V. Komarov, V. P. Kuznetsova, and I. I. Igonina	647	699
An Investigation of the Synthesis and Transformation of Unsaturated Silicon-Containing Compounds. Communication 2. Cyanoethylation of Tertiary Silicon-Containing Acetylenic Alcohols. M. F. Shostakovskii, L. M. Kaliberdo, and N. V. Komarov	651	703
Chemical Transformations of Unsaturated and High-Molecular Compounds. XVIII. Polymerization and Copolymerization of Divinyl Tartrate and Methyl Methacrylate. M. F. Shostakovskii, A. M. Khomutov, and A. P. Alimov	654	706
The Diene Synthesis with Participation of Vinyl Ethers. V. Reaction of Divinyl Ether with Hexachlorocyclopentadiene. M. F. Shostakovskii, A. V. Bogdanova, and T. M. Ushakova	657	709

CONTENTS (continued)

	PAGE	RUSS. PAGE
Alkylation of Normal Paraffins with Olefins at High Temperatures and Pressures. L. Kh. Freidlin, N. M. Nazarova, and A. I. Palii	662	714
BRIEF COMMUNICATIONS		
The Kinetics of the Hydrogenation of the Vinyl Ether of β-(Diethylamino)-ethanol and of Vinyl Phenyl Ether on 1%-Pd/Al_2O_3. Kh. M. Minachev and Yu. S. Khodakov	668	722
An Investigation of the Products of the Dehydrocyclization of n-Hexane and of the Dehydrogenation of Cyclohexane over an Aluminum-Molybdenum Catalyst. Kh. M. Minachev, V. S. Smirnov, D. A. Kondrat'ev, and G. A. Loginov	670	724
A Series of Radicals, Arranged According to the Rate of Their Removal from an Atom of Mercury by Hydrochloric Acid. A. N. Nesmeyanov, A. E. Borisov, I. S. Savel'eva, and N. V. Kruglova	672	726
The Carbocyclization of 1,6-Anhydrogalactoses. N. N. Shorygina and G. V. Davydova	674	728
LETTERS TO THE EDITOR		
On the Nature of the Fermentative Activity of Lysozyme	676	729
The Influence of the Solvent on the Spatial Directivity of the Wittig Reaction. L. D. Bergel'son, V. A. Vaver and M. M. Shemyakin	677	729
Compounds of the Type $(RCH=CR')_3Sb(C_2H_5)_2$. A. N. Nesmeyanov, A. E. Borisov, and N. V. Novikova	678	730
CURRENT EVENTS		
The General Meeting of the Division of Chemical Sciences of the Academy of Sciences of the USSR, November 24-25, 1960	679	731

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR
Division of Chemical Science

Number 5 May, 1961

CONTENTS

	PAGE	RUSS. PAGE
Dear Sergei Sergeevich	681	737
INORGANIC AND ANALYTICAL CHEMISTRY		
Silicate of Rare-Earth Elements. Communication 4. New Silicates in the System La_2O_3–SiO_2. N. A. Toropov and I. A. Bondar'	682	739
Investigation of the Structure of the Gallium Chloride Complex with the Dye Methylene Blue. K. A. Bol'shakov, Yu. G. Eremin, and R. P. Evstigneeva	688	745
Investigation of the Nature of the Microporous Structure in Activated Charcoals. Communication 4. The Growth of the Micropore Volume during the Activation of Charcoals. M. M. Dubinin	693	750
Study of Capillary Condensation in Highly Disperse Systems. Communication 4. Capillary Condensation in Systems Comprising a Great Number of Contacting Particles. L. V. Radushkevich	699	756
The Formation of Carbon Dendrites in the Decomposition of Alcohols on Nickel. A. A. Balandin, A. P. Rudenko, and G. Stegner	705	762
The Compensation Effect in Activation Processes from the Point of View of Statistical Kinetics. Part I. Calculation of the Pre-Exponential Factor in the Formula for the Rate of the Process. S. Z. Roginskii and Yu. L. Khait	713	771
The Phase Composition and Texture of Alumino-Chrome Catalysts Prepared by Simultaneous Precipitation. A. M. Rubinshtein, A. L. Klyachko-Gurvich, and V. M. Akimov	722	780
On the Catalytic Decomposition of Ethylbenzene Hydroperoxide. A. G. Korsun, V. Ya. Shlyapintokh, and N. M. Emanuel'	729	788
On the Probability of Self-Inhibition of Complex Chain Reactions. E. T. Denisov	736	796
Mono-π-cyclopentadienyl Derivatives of Titanium. A. N. Nesmeyanov, O. V. Nogina, and A. M. Berlin	743	804
Fluorine Containing β-Lactones. Part II. β-Trifluoromethyl-β-methyl-β-propiolactone. I. L. Knunyants and Yu. A. Cheburkov	747	808
Fluorine Containing β-Lactones. Part III. Opening of the Four-Membered Ring in β-Trifluoromethyl-β-methyl-β-propiolactone. I. L. Knunyants and Yu. A. Cheburkov	750	811
Fluorine Containing β-Sultones. Part VII. Use of Tetrafluoroethane-β-sultone in Acetylation. G. A. Sokol'skii and I. L. Knunyants	752	813
Imides of Acids of Phosphorus. Communication 5. The Reaction of Trialkyl Phosphites with Hydrazoic Acid. M. I. Kabachnik and V. A. Gilyarov	755	816
Imides of Acids of Phosphorus. Communication 6. Trialkyl-N-acyl Imidophosphates. M. I. Kabachnik and V. A. Gilyarov	758	819
Investigation of the Tautomerism and Geometric Isomerism of Nitrogen-Containing Derivatives of Carbonyl Compounds. Communication 3. Polarographic Investigation of Some Semi- and Thiosemicarbazones in Aqueous-Alcoholic Solutions. Yu. P. Kitaev, G. K. Budnikov, and A. E. Arbuzov	762	824

CONTENTS (continued)

	PAGE	RUSS. PAGE
Synthesis of Fluorinated Ketones by Means of Organolithium Compounds and N,N-Dialkyl Amides of Fluorinated Acids. N. A. Zaitseva, E. M. Panov, and K. A. Kocheshkov	769	831
The Synthesis of Vinyl Naphthalenes with Fluorinated Side Chains. G. V. Kazennikova, T. V. Talalaeva, A. V. Zimin, A. P. Simonov, and K. A. Kocheshkov	772	835
The Reaction of Ethylene with Trichloro- and Tetrachloroethylene. A. B. Belyavskii and R. Kh. Freidlina	775	838
Stereochemistry of Heterocyclic Compounds. Article 5. Possible Configuration of Stereoisomers of 1,2,5-Trimethyl-4-ethynyl-4-piperidinol and Their Conversion Products. N. I. Shvetsov, B. V. Unkovskii, I. A. Mokhir, and V. F. Kucherov	779	843
Chemistry of Dihydroresorcinol. Article 7. Interaction of Cyclic β-Dicarbonyl Compounds with Hydrogen Peroxide in an Alakaline Medium. S. I. Zav'yalov, A. F. Vasil'ev, and L. P. Vinogradova	784	849
Hydrodealkylation of Homologs of Cyclohexane over Nickel/Alumina Catalyst under Hydrogen Pressure. N. I. Shuikin and T'ien Hsing-hua	788	854
Catalytic Dehydrochlorination of Methylchlorocyclohexanes to Methylcyclohexenes. N. I. Shuikin, E. D. Tulupova, Z. P. Polyakova, and D. A. Kondrat'ev	792	858
Dehydrogenation of 2,2,4-Trimethylpentane over Alumina-Chromia-Potassia Catalyst. E. A. Timofeeva, N. I. Shuikin, and T. P. Dobrynina	797	863
Dealkylation of Mesitylene and Associated Alkylation of Benzene and Toluene in Presence of Synthetic Alumosilicates. A. V. Topchiev, G. M. Mamedaliev, and L. S. Kovaleva	801	868
Investigation of the Influence of the Pressure, the Temperature, and the Concentration of Thiophene on the Degree of Dehydrogenation and Isomerization of Cyclohexane in the Presence of Platinum Catalysts. Kh. M. Minachev and D. A. Kondrat'ev	809	877
Free-Radical Addition of Primary Alcohols to α-Olefins. G. I. Nikishin, V. D. Vorob'ev, and A. D. Petrov	814	886
Products of the Nitration of α- and α'-Aminonicotines. Ya. L. Gol'dfarb, L. V. Antik, and V. A. Petukhov	818	887
Catalytic Polymerization of Olefins. XIII. Polymerization of Isobutylene in the Presence of Some Silicagel Samples. Ya. T. Éidus and B. K. Nefedov	825	894
The Synthesis of Vinylpyrrolidone. S. N. Ushakov, V. V. Davidenkova, and V. V. Lushchik	831	901
The Nature of the Branching of the Polarographic Wave of Albumins in Solutions of Cobalt Salts. S. G. Mairanovskii and É. F. Mairanovskaya	853	922
Polymerization of the Vinyl Ether of Methylcyclopropylcarbinol. M. F. Shostakovskii, E. P. Gracheva, A. P. Meshcheryakov, and V. G. Glukhovtsev	858	924
Regulating the Specificity of the Homogeneity of Cellulose by Means of Temperature in the Process of Treatment with Dilute Nitric Acid. B. A. Zakharov, V. I. Ivanov, A. L. Mal'tseva, and G. A. Krylova	858	926
β-Decomposition of Butyl Esters of α, β-Dibromoethylboronic and β, γ-Dibromopropylboronic Acids. B. M. Mikhailov and P. M. Aronovich	860	927

CONTENTS (continued)

	PAGE	RUSS. PAGE
The Hydrolytic Cleavage of D'-Methoxy-D-(hydroxymethyl)diethylene Glycol in Acid Medium. Z. I. Kuznetsova and V. I. Ivanov	863	930
A New Method for the Synthesis of N-Alkyl-4-piperidones. É. A. Mistryukov, N. I. Aronova, and V. F. Kucherov	866	932
LETTERS TO THE EDITOR		
Reaction of Organolithium Compounds with Ketoxides of Steroids. N. N. Suvorov, L. V. Sokolova, and N. V. Makarov	869	934
Relationship between Rate Constants and between Equilibrium Constants of Reactions in Solutions under Pressure. B. S. Él'yanov and M. G. Gonikberg	870	934
REPORT		
Annual General Meeting of the Department of Chemical Sciences of the Academy of Sciences of the USSR on the 31st January, 1961	871	936

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 6 June, 1961

CONTENTS

	PAGE	RUSS. PAGE
Preparation and Investigation of the Properties of the Gallium Chloride–Methylene Blue Complex. K. A. Bol'shakov, Yu. G. Eremin, and V. A. Bardin	877	945
The Formation of Magnesium Hydroxide. A. I. Ul'yanov	882	951
The Peroxides of Titanium, Zirconium, and Cerium Formed in the Reaction of their Hydroxides with Hydrogen Peroxide. S. Z. Makarov and L. V. Ladeinova	889	958
The Vibration Spectra and Structures of Some Rare Earth Element Silicates. A. N. Lazarev and T. F. Tenisheva	894	964
Adsorption of Vapors on Nonporous Sorbent Models with a Physically Modified Surface. Communication I. Low Temperature Adsorption of Nitrogen on Carbon Black with Preadsorbed Water. A. I. Sarakhov, M. M. Dubinin, Yu. F. Berezkina, and E. D. Zaverina	902	974
Investigation of Capillary Condensation of Vapors in Highly Dispersed Systems. Communication 5. Analysis of the Joint Process of Adsorption and Capillary Condensation in Systems of Contacting Particles. L. V. Radushkevich	911	984
Mechanism of Carbon Formation in the Decomposition of Methane, Ethane, Ethylene, and Acetylene on Silica Gel. A. P. Rudenko, A. A. Balandin, and M. M. Zabolotnaya	916	989
Decomposition of Isopropanol on Alumina–Chromium Catalysts. A. M. Rubinshtein, A. V. Sagalovich, and N. A. Pribytkova	922	996
Rate Constant and Mechanism of the Reaction of Atomic Oxygen with Acetaldehyde. L. I. Avramenko, R. V. Kolesnikova, and M. F. Sorokina	930	1005
The Spectra and Structure of Vinyl Ethers. P. P. Shorygin, T. H. Shkurina, M. F. Shostakovskii, and E. P. Gracheva	935	1011
The Synthesis of Esters of Phosphinic Acids Containing Heterocyclic Radicals. Communication 7. Esters of Phosphinic Acid with Mono- and Di-Oxidoquinoxalinic Radicals. B. A. Arbuzov, V. M. Zoroastrova, and L. A. Antokhina	940	1016
On Imides of the Phosphorus Acids. Communication 7. Amide-Imide Tautomerism of the Amides of Pentavalent Phosphorus Acids. M. I. Kabachnik, V. A. Gilyarov, and E. M. Popov	945	1022
The Condensation Reaction of Methylphosphonic Acid with α,ω-Diethoxydimethylsiloxanes. K. A. Andrianov, T. V. Vasil'eva, and L. M. Khananashvili	952	1030
Cis-Trans-Dipropenylmercury. A. E. Borisov	957	1036
Reaction of Asymmetric Organomercury Compounds with Thallium Trichloride. A. E. Borisov and M. A. Osipova	960	1039
Synthesis of Organomercury Nitro Compounds. Communication 4. Addition of Mercury Salt of Trinitromethane to Unsaturated Hydrocarbons. V. A. Tartakovskii, S. S. Novikov, and T. I. Godovikova	963	1042
Chemical Transformations of 1,1-Dichloroalkanes. E. I. Vasil'eva and R. Kh. Freidlina	969	1049
Fluorine Containing β-Sultones. Communication 8. β-Sultones as Promoters of Acylation. G. A. Sokol'skii and I. L. Knunyants	972	1053

CONTENTS (continued)

	PAGE	RUSS. PAGE
Fluorine Containing β-Sultones. Communication 9. Reaction of Fluorine Containing β-Sultones with Mercaptans. G. A. Sokol'skii, M. A. Dmitriev, and I. L. Knunyants	975	1055
Unsaturated Acids Containing a Trifluoromethyl Group. Communication 3. Polarization of the Double Bond in β-Trifluoromethylcrotonic Acid. I. L. Knunyants and Yu. A. Cheburkov	977	1057
Fluorinated Styrenes. Communication 5. α,β,β-Trifluorostyrenes. G. V. Kazennikova, T. V. Talalaeva, A. V. Zimin, A. P. Simonov, and K. A. Kocheshkov	982	1063
Fluorinated Styrenes. Communication 6. α-Difluoromethylstyrenes and α-Trifluoromethylstyrenes. G. V. Kazannikova, T. V. Talalaeva, A. V. Zimin, and K. A. Kocheshkov	985	1066
Condensation of p-Trimethylsilylbenzaldehyde with Aldehydes and Ketones. B. N. Dolgov, N. E. Glushkova, and N. P. Kharitonov	989	1069
Synthesis of 19-Norsteroids Based on 3-Methoxy-D-Homoestra-1,3,5(10),8,14-Pentaen-17a-One. S. N. Ananchenko, A. V. Platonova, V. N. Leonov, and I. V. Torgov	993	1074
Synthesis of the 2-Ethyleneketal of Anti-Trans-Δ^{10}-Dodecahydrophenanthrenetrione-2,5,8. K. K. Pivnitskii and I. V. Torgov	999	1080
Investigations into the Field of Stereochemistry of Cyclic Compounds. Communication 39. Synthesis and Stereospecific Conversions of Monoesters of Cis-Syn- and Cis-Anti-Δ^{7}-Hydrindene-4,5-Dicarboxylic Acids. V. F. Kucherov and E. P. Serebryakov	1005	1087
The Alkylation of Phenols by Compounds with Mixed Functions. Communication 1. The Alkenylation of m-Cresol by Allyl Alcohol. N. I. Shuikin, E. A. Viktorova and I. E. Pokrovskaya	1010	1094
Catalytic Alkylation of Tetralin. Communication 5. Alkylation of Tetralin by Primary Alcohols Containing C_7 above. N. I. Shuikin, N. A. Pozdnyak, and E. D. Lubuzh	1014	1098
The Preparation of Pyrylium Salts by the Bisacylation of Olefins. Communication 5. The Bisacetylation of Di- and Triisobutylene. A. T. Balaban, A. Genya, and C. D. Nenitzescu	1018	1102
Tautomerism of Nitro Compounds. Communication 3. The Influence of Temperature and Ion Strength of Solutions on the Rate of Tautomeric Conversion of Phenylnitromethane. V. M. Belikov, S. G. Mairanovskii, Ts. B. Korchemnaya, and S. S. Novikov	1023	1108
Studies of the Lactones and Lactams. Communication 20. The Reaction of N-(Chloroalkyl)Lactams with Alcohols. M. F. Shostakovskii, F. P. Sidel'kovskaya, É. V. Rogova, F. L. Kolodkin, and F. Ibragimov	1026	1111
Studies of the Chemical Conversions of Unsaturated and High Molecular Weight Compounds. Communication 19. Alternation During Copolymerization of Vinyl Ethers. A. M. Khomutov	1030	1116
Catalytic Hydrogenation of Dimethylvinylethynylcarbinol. L. Kh. Freidlin, B. D. Polkovnikov, and V. I. Gorshkov	1033	1120
Catalytic Hydrocondensation of Carbon Monoxide with Olefins and Their Hydropolymerization under the Action of Carbon Monoxide and Hydrogen. Communication 31. Relation of 2-Methylbutene-1 and 3,3-Dimethylbutene-1 to Hydrocondensation Catalysis. Ya. T. Éidus, B. K. Nefedov, I. P. Yakovlev, and A. V. Lobzova	1040	1127

CONTENTS (continued)

	PAGE	RUSS. PAGE
A Study of the Hydrobrominolysis of Glycine Esters. K. T. Poroshin, V. G. Debabov, and V. I. Maksimov	1047	1134
Optical Investigation of the Conformations of Cyclopentanone and α-Chlorocyclopentanone. M. I. Batuev, A. A. Akhrem, A. V. Kamernitskii, and A. D. Matveeva	1050	1138
BRIEF COMMUNICATIONS		
Synthesis of 1-n-Butylthioboracycloalkanes. B. M. Mikhailov and T. A. Shchegoleva	1054	1142
Reduction of Methylcyclohexanones with Diisobutylaluminum Hydride. L. I. Zakharkin and I. M. Khorlina	1057	1144
Thermal Alkylation of Cyclopentane with Olefins. L. Kh. Freidlin, N. M. Nazarova, and E. F. Litvin	1059	1146
Aminotriazoles in the Mannich Reaction. S. S. Novikov, V. A. Rudenko, and B. M. Brusnikina	1062	1148
The Selectivity of the Hydrogenation of 2-Ethylanthraquinone over Nickel Catalyst. L. Kh. Freidlin and E. F. Litvin	1064	1150
Use of Trans-1-Vinyl-6-Acetoxy- and Trans-1-Vinyl-6-Ethylenedioxy-9-Methyl-Δ^1-Octalins in Diene Synthesis Reactions. V. F. Kucherov and I. A. Gurvich	1067	1152
Temperature Coefficient of Radiochemical Reactions and Its Connection with Primary Water-Radiolysis Processes. I. V. Vereshchinskii	1070	1154
Synthesis of o-Hydroxybenzenesulfinic Acid—A New Analytical Reagent. D. I. Kuznetsov and I. P. Alimarin	1072	1155
Catalytic Alkylation of Tetralin by Nonene-1 in the Presence of Aluminum. N. I. Shuikin and N. A. Pozdnyak	1074	1156
On the Action of Amines and Ammonia on Triallylboron. B. M. Mikhailov and F. B. Tutorskaya	1076	1158
A New Method of Vitamin A Synthesis. Zh. A. Krasnaya and V. F. Kucherov	1078	1160
LETTERS TO THE EDITOR		
Synthesis of $\Delta^{4,9}$-D-Homoestradienol-14ξ-Dione-3,17a. N. N. Gaidamovich and I. V. Torgov	1080	1162
Polymers and Trimers of Alkylmercaptoboranes. B. M. Mikhailov, T. A. Shchegoleva, E. M. Shashkova, and V. D. Sheludyakov	1081	1163
Bis(Alkylamino) Boranes. B. M. Mikhailov and V. A. Dorokhov	1082	1163
Synthesis of 18-NOR-D-Homoequilenin Methyl Ether. A. A. Akhrem, Yu. A. Titov, and I. N. Minaeva	1083	1164

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR
Division of Chemical Science

Number 7 July, 1961

CONTENTS

	PAGE	RUSS. PAGE
INORGANIC AND ANALYTICAL CHEMISTRY		
Peroxy Compounds of Zirconium as Products of the Interaction of the Hydroxide with Hydrogen Peroxide. S. Z. Makarov and L. V. Ladeinova	1085	1169
Peroxy Compounds of Cerium. S. Z. Makarov and L. V. Ladeinova	1091	1176
Investigation into the Adsorptive Properties and the Secondary Porous Structure of Adsorbents Acting as Molecular Sieves. Communication 2. Comparison of Calculated and Experimental Values for the Maximum Amounts and Volumes Adsorbed by Synthetic Zeolites of the Type A. M. M. Dubinin	1097	1183
Sorption Kinetics of Water Vapor on Type A Zeolites. D. P. Timofeev and I. T. Erashko	1105	1192
The Compensation Effect in Activation Processes From the Point of View of Statical Kinetics. Part 2. Possible Physical Causes for the Appearance of the Compensation Effect in Certain Systems and Processes. S. Z. Roginskii and Yu. L. Khait	1110	1198
Formation of Unstable Forms of Phthalocyanines and of Hematoporphyrin During Flash Illumination. A. N. Terenin, E. B. Lyubomudrov and A. V. Shablya	1117	1206
A Study of Reactions of Electrophillic Substitution at a Saturated Carbon Atom by the Method of Isotopic Exchange. Communication I. The Kinetics of the Reaction of Isotopic Exchange in Pyridine Solution between the Ethyl Ester of α-Bromomercuryphenylacetic Acid, and Mercuric Bromide Labeled with Hg^{203}. O. A. Reutov, V. I. Sokolov, and I. P. Beletskaya	1123	1213
A Study of Reactions of Electrophilic Substitution at a Saturated Carbon Atom by the Method of Isotopic Exchange. Communication 2. The Kinetics of the Reaction of Isotopic Exchange in Aqueous Dioxan Solution Between the Ethyl Ester of α-Bromomercuryphenylacetic Acid and Mercuric Bromide Labeled with Hg^{203}. O. A. Reutov, V. I. Sokolov, and I. P. Beletskaya	1127	1217
A Study of the Tautomerism and Geometric Isomerism of Nitrogen-Containing Derivatives of Carbonyl Compounds. Communication 4. A Polarographic Study of the Conversion of Some Semi- and Thiosemicarbazones in Aqueous-Alcoholic Solutions. Yu. P. Kitaev, G. K. Budnikov, and A. E. Arbuzov	1132	1222
The Influence of Gamma-Radiation on the Catalytic Activity of Platinized Aluminum Silicate. Kh. M. Minachev, M. A. Markov, and Yu. S. Khodakov	1138	1227
A Photochemical Study of the Mechanism of the Reaction between Oxygen Atoms and Acetaldehyde. L. N. Avramenko and R. V. Kolesnikova	1141	1231
The Role of Oxygen in Structure Formation on Metal Surfaces. N. A. Shishakov, N. K. Andrushchenko, and U. A. Asanov	1144	1234
Theory of Flame Propagation in Systems with Chain Branching Reactions. L. A. Lovachev.	1153	1240
Products of Mercuric Salt Addition to Disubstituted Acetylenes. A. N. Nesmeyanov, ORGANIC AND BIOLOGICAL CHEMISTRY A. E. Borisov, I. S. Savel'eva, and M. A. Osipova	1161	1249
Telomerization of Ethylene with Polychloroalkanes Containing the CCl_2Br-group. V. N. Kost and R. Kh. Freidlina	1164	1252

CONTENTS (continued)

	PAGE	RUSS. PAGE
Rearrangement During the Process of Thermal Telomerization of Ethylene with Silicon Hydrides. R. Kh. Freidlina, Yu. P. Egorov, E. Ts. Chukovskaya, Tsao, and E. D. Lubuzh	1168	1256
Reaction of Aluminum Chloride with Dialkylcyclosiloxanes. A. A. Zhdanov, K. A. Andrianov, and A. A. Bogdanova	1172	1261
The Cohydrolysis Reaction of Bis-(methyldichlorosilyl)benzenes with Trimethylchlorosilane. K. A. Andrianov and N. V. Delazari	1177	1266
Study of the Effect of the Structure of Unsaturated Organosilicon Compounds on Their Hydrogenation Rates. L. Kh. Freidlin, I. F. Zhukova, and V. F. Mironov	1180	1269
Organosilicon Compounds with Carbon Bridges Between the Atoms of Silicon. Communication 2. The Interaction with Aluminum Halides. V. M. Vdovin, K. S. Pushchevaya, and A. D. Petrov	1185	1275
The Monooxide and Dioxide of Abietic Acid. B. A. Arbuzov and A. G. Khismatuilina	1190	1280
Esters of Cyclohexen-2-yl-1-phosphinic Acid and Some of Their Derivatives. B. A. Arbuzov and E. N. Dianova	1197	1288
Synthesis of β-Aroylacrylic Acids and Their Amides. A. N. Nesmeyanov, N. I. Rybinskaya, and L. V. Rybin	1201	1292
Carcinolytic Peptides with Selective Action. Communication 2. p-Bis(2-Chloroethyl)Amino-D, L-Phenylalanyl-D,L-Valine. K. I. Karpavichus, N. E. Golubeava, O. V. Kil'disheva, and I. L. Knunyants	1206	1297
Carcinolytic Peptides with Selective Action. Communication 3. N-[p-Bis(2-Chloroethyl)Amino-phenylacetyl] Amino-Acids and N-(γ-[p-Bis(2-chloroethyl)aminophenyl]butyryl) Amino-Acids. K. I. Karpavichus, N. E. Golubeva, O. V. Kil'disheva, and I. L. Knunyants	1208	1299
Hydrogen Isotope Exchange in Alkyl Halides. Communication 4. Hydrogen Exchange Between Tert-Alkyl Bromides and Anhydrous Acetic Acid in the Presence of Aprotic Acids. E. V. Bykova, V. N. Sekina, and D. N. Kursanov	1211	1303
Reforming of Gasoline Fractions of Volga-Ural Crudes on Rhenium—Alumina Catalyst Treated with Hydrogen Sulfide. Kh. M. Minachev, M. A. Ryashentseva, and V. A. Petukhov	1215	1307
Determination of Individual Hydrocarbon Composition of Tatar Crudes. Communication 5. Ligroin From Crude of the Bavly Deposit. B. Le, R. I. Izmailov, F. A. Urmancheev, I. P. Lipatova, S.-Kh. G. Kashaev, I. A. Lamanova and R. G. Bukharaeva	1218	1310
Conversions of Cyclohexane on Palladinized Gumbrine Under Hydrogen Pressure. N. I. Shuikin, Kh. M. Minachev, M. A. Ryashentseva, and Yu. A. Afanas'eva	1223	1315
Dehydrogenation of n-Octane and 250-320° Synthine Fraction in the Presence of Activated Wood Charcoal. E. A. Timofeeva, V. S. Smirnov, and V. I. Bogomolov	1227	1320
Free-Radical Addition of Dicarboxylic Acid Esters to α-Olefines and the Synthesis of α-Alkyldicarboxylic Acid Esters. G. I. Nikishin, Yu. N. Ogibin, and A. D. Petrov	1232	1326
Polymerization and Copolymerization of N-Vinyl Compounds. Communication 8. Polymerization of Vinylsuccinimide in Aqueous Solution. A. F. Nikolaev, S. N. Ushakov, and N. V. Daniel'	1236	1330
Catalytic Hydropolymerization of Olefines and Their Hydrocondensation with Carbon Monoxide. Ya. T. Eidus	1241	1336

CONTENTS (continued)

	PAGE	RUSS. PAGE
BRIEF COMMUNICATIONS		
The Effect of the Nitrogen Function of 4-Ketodecahydroquinoline on the Relative Stability of Cis and Trans Isomers. É. A. Mistryukov and V. F. Kucherov	1247	1343
The Reverse Schotten-Bauman Reaction and the Stereochemistry of Decahydroquinoline and Its Derivatives. É. A. Mistryukov and V. F. Kucherov	1249	1345
The Synthesis of N-Trialkylborazines From Alkylamine-Boranes in the Presence of Mercaptans. B. M. Mikhailov and V. A. Dorokhov	1251	1346
The Synthesis of Some Monoketones of the Cis-Hydrindane Series. V. F. Kucherov, L. N. Ivanova, and T. A. Severina	1253	1348
A Rapid, Simple Method for Microdetermination of Carbon and Hydrogen in Monomers and Polymers of Fluoroorganic Compounds. A. I. Lebedeva, N. A. Nikolaeva, and V. A. Orestova	1256	1350
The Electrochemical Behavior of Pyridine. G. A. Tedoradze, S. G. Mairanovskii, and L. D. Klyukina	1259	1352
LETTERS TO THE EDITOR		
The Synthesis of Benzonitrile Derivatives of Allyl Palladium Chloride. N. M. Klimenko, I. I. Moiseev, and Ya. K. Syrkin	1261	1355
Silicon Analogs of Carbenes and the Synthesis of Three Membered Heterocycles Which Contain Silicon. M. E. Vol'pin, Yu. D. Koreshkov, and D. N. Kursanov	1262	1355
Infrared Spectrometric Determination of Methionine. Ch. P. Ivanov, B. V. Aleksiev, M. A. Krysteva, and B. I. Iordanov	1263	1356
CHRONICLE		
General Meeting of the Division of Chemical Science of the Academy of Sciences, USSR, March 9-10, 1961	1264	1357

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 8 August, 1961

CONTENTS

	PAGE	RUSS. PAGE
INORGANIC AND ANALYTICAL CHEMISTRY		
Silicates of the Rare-Earth Elements. Communication 5. Phase Diagrams of the Dy_2O_3–SiO_2 and Er_2O_3–SiO_2 Systems. N. A. Toropov, F. Ya. Galakhov, and S. F. Konovalova	1271	1365
Silicates of the Rare-Earth Elements. Communication 6. Phase Diagrams of the Binary Systems Sm_2O_3–SiO_2 and Yb_2O_3–SiO_2, and Comparison of These Silicates with the Other Rare-Earth Element Silicates Which Have Been Studied. N. A. Toropov and I. A. Bondar'	1276	1372
Investigation of the Adsorptional Properties and Secondary Porous Structure of Adsorbents, Having a Molecular Sieve Action. Communication 3. Components of the Granules of Synthetic Type A Zeolites. M. M. Dubinin, E. D. Zaverina, V. M. Luk'yanovich, and N. P. Kharlamov	1286	1380
Study of the Adsorptional Properties and Secondary Porous Structure of Adsorbents with a Molecular Sieve Action. Communication 4. Granulated Synthetic Type A Zeolites. M. M. Dubinin, M. M. Vishnyakova, E. D. Zaverina, E. G. Zhukovskaya, and A. I. Sarakhov	1293	1387
The Adsorption Energies of CO_2, SO_2, $(CH_3)_2CO$ and $(C_2H_5)_2O$ on Graphite. N. N. Avgul, A. V. Kiselev, and I. A. Lygina	1300	1395
The Adsorption Energies of Water, Alcohols, Ammonia, and Methylamine on Graphite. N. N. Avgul, A. V. Kiselev, and I. A. Lygina	1308	1404
The Catalytic Effect of Water on the Chemical Reaction Between Oxides at High Temperatures. A. I. Leonov	1314	1411
Physical and Chemical Properties of WS_2 Catalytsts. Communication 6. Pore Structure and Chemical Composition of an Unmixed WS_2 Catalyst. S. M. Samoilov	1319	1416
Isotope Exchange Study of the Electrophilic Replacement Reaction in a Saturated Carbon Atom. Communication 3. Isotope Exchange in Esters of α-Brommercuryarylacetic Acids with Mercuric Bromide, Labeled with Hg_2O_3, in Aqueous Dioxane. O. A. Reutov, V. I. Sokolov, and I. P. Beletskaya	1328	1427
The Influence of γ-Radiation on the Activity of Catalysts Containing Platinum. Kh. M. Minachev and Yu. S. Khodakov	1331	1430
An Investigation of the Chemical Condition of Radiophosphorus in Crystals of Potassium Chloride Irradiated with High-Energy Protons. A. N. Murin, S. N. Banasevich, and R. V. Bogdanov	1334	1433
Combination Dispersion [Raman] Spectra of Certain Benzene-Series Hydrocarbons with One or Two Side Chains. V. T. Aleksanyan, Kh. E. Sterin, S. A. Ukholin, O. V. Bragin, A. L. Liberman, E. A. Mikhailova, E. N. Smirnova, N. I. Tyun'kina, and B. A. Kazanskii	1338	1437

CONTENTS (continued)

	PAGE	RUSS. PAGE
Combination Dispersion [Raman] Spectra of Certain Tri- and Tetraalkylbenzenes and Condensed Aromatic Hydrocarbons. Kh. E. Sterin, V. T. Aleksanyan, S. A. Ukholin, O. V. Bragin, A. E. Gavrilova, S. V. Zotova, A. L. Liberman, E. A. Mikhailova, É. N. Smirnova, O. D. Sterligov, and B. A. Kazanskii	1344	1444
ORGANIC AND BIOLOGICAL CHEMISTRY		
Addition of Benzenethiol to 2-Cyanovinyl Ketones. A. N. Nesmeyanov, L. V. Rybin, and M. I. Rybinskaya	1350	1451
Reactions of Alkoxy(Chloromethyl)Methylsilanes with Sodium Diethyl Phosphate and with Sodium Dimethylphosphinate. K. A. Andrianov and I. K. Kuznetsova	1353	1454
Telomerization of Dimethylcyclosiloxanes. Communication 1. Preparation of Linear α,ω-Dichloropolydimethylsiloxanes. K. A. Andrianov, V. V. Severnyi, and B. G. Zavin	1356	1456
Perfluoro α,ω-Diolefins and Some of Their Reactions. I. L. Knunyants, Li Dzhi-yuan', and V. V. Shokina	1361	1462
Fluorine-Containing β-Sultones. Communication 10. Value of the Group Refraction of Fluorosulfonyl. G. A. Sokol'skii and I. L. Knunyants	1367	1468
Thermal Decomposition of Alkoxides Derived from Tertiary Alcohols Containing Trifluoromethyl Groups. I. L. Knunyants, Yu. A. Cheburkov, and Yu. V. Makarov	1370	1471
Stereochemistry of Cyclic Compounds. Communication 41. Synthesis of Geometric Isomers of Hexahydro- and Octahydro-7-Methoxy-1,2-Phenanthrenedicarboxylic Acids. V. M. Andreev, G. M. Segal', and V. F. Kucherov	1374	1475
β-Dicarbonyl Compounds. Communication 9. Reaction of β-Dicarbonyl Compounds with Hydrogen Peroxide. L. P. Vinogradova and S. I. Zav'yalov	1380	1482
Free-Radical Addition of Carboxylic Acids to α-Olefins. G. I. Nikishin, Yu. N. Ogibin, and A. D. Petrov	1384	1487
Synthesis of Ethoxyacetaldehyde, and Its Chemical Reactions. M. F. Shostakovskii, N. V. Kuznetsov, N. A. Dubovik, and K. Kh. Zikherman	1392	1495
Cellulose and Chitin Esters, and the Reactivity of Cellulose and Chitin. S. N. Danilov, E. A. Plisko, and É. A. Pyaivinen	1396	1500
Catalytic Properties of Rare-Earth Elements. Communication 1. Transformations of Heptane, Cyclohexane, and Ethylcyclopentane over Erbium Oxide. Kh. M. Minachev, M. A. Markov, and O. K. Shchukina	1402	1507
BRIEF COMMUNICATIONS		
Synthesis of 2-Methylacetoacetic Ester by the Methylation of Acetoacetic Ester with Dimethyl Sulfate. É. A. Mistryukov	1406	1512
2-Bromohexafluoroisobutyric Acid and Its Derivatives. I. L. Knunyants, L. S. German, and B. L. Dyatkin	1408	1513
Density of N-Methylformamide. Yu. I. Sinyakov, A. I. Gorbanev, Yu. M. Povarov, and Yu. M. Kessler	1410	1514
Mechanism of the Thermal Decomposition of Carboxylic Salts. M. M. Shemyakin	1412	1515
Effect of Spinel Formation on the Regenerability of an $Ni-Al_2O_3$ Catalyst. V. M. Akimov, A. A. Slinkin, A. M. Rubinshtein, N. I. Shuikin, N. F. Kononov, and L. K. Kashkovskaya	1413	1516
Alkylation of Anisole and Phenetole with Isoamylenes. E. A. Viktorova, N. I. Shuikin, G. S. Korosteleva, and N. G. Baranova	1415	1518

CONTENTS (continued)

	PAGE	RUSS. PAGE
Dispersity and Electrical Properties of Aerosols Arising in the Radiolysis of Gaseous Hydrocarbons. V. S. Bogdanov	1417	1520
Structure of the Trimer of Acrolein Diethyl Acetal. S. S. Yufit and V. F. Kucherov	1420	1522
1-[2-(Vinylthio)Ethyi]-2-Pyrrolidinone. M. F. Shostakovskii, F. P. Sidel'kovskaya, É. S. Shapiro, and T. Ya. Ogibina	1423	1524
LETTERS TO THE EDITOR		
Electron Paramagnetic Resonance Spectrum of β-Carotene. Ya. K. Syrkin and V. M. Kazakova	1426	1527
Vapor-Phase Catalytic Ketonization of Acetic Acid Over Quadrivalent-Metal Oxides and BeO. V. I. Yakerson, É. A. Fedorovskaya, A. L. Klyachko-Gurvich, and A. M. Rubinshtein	1427	1527
Investigation of Charge Exchange of the Thermal Ions A^+, Kr^+, and Xe^+ by the Impulse Method for the Molecules CH_4, C_2H_6, and C_2H_4. G. V. Karachevtsev, M. I. Markin, and V. L. Tal'roze	1428	1528

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 9 September, 1961

CONTENTS

	PAGE	RUSS. PAGE
The 100th Anniversary of the Theory of Chemical Structure. G. V. Bykov	1433	1533
Investigation of the Kinetics of Sorption of Water Vapor from a Gas-Carrier Stream on Type A Zeolite. D. P. Timofeev and O. N. Kabanova	1438	1539
The Catalytic Behavior of Niobium Pentoxide During Vapor-Phase Amination of Ethyl Alcohol with Aniline. A. A. Balandin and N. P. Sokolova	1442	1543
The Mechanism by Which Propane Forms During the Decomposition of Isopropyl Alcohol Over Vanadium Trioxide. A. A. Balandin, G. V. Isagulyants, N. P. Sokolova, and I. I. Zakharycheva	1447	1549
The Effect of Alkali Metal Oxides on the Activity, Selectivity and the Phase Composition of Binary Catalysts Based on Al_2O_3. A. M. Rubinstein N. A. Pribytkova, V. M. Akimov, L. D. Kretalova and A. L. Klyachko-Gurvich	1450	1552
Investigation into the Physical and Chemical Properties of WS_2-Catalysts. Communication 7. Hydrogenation of Phenol Under Pressure in the Presence of a Nonmixed WS_2-Catalyst Promoted by Sulfur, Selenium, Tellurium or Phosphorus. S. M. Samoilov	1456	1559
Isotope Exchange Study of Electrophilic Substitution at a Saturated Carbon Atom. Communication 4. Kinetics of the Isotope Exchange of the Ethyl Ester of α-Brommercury Phenylacetic Acid with Mercuric Bromide Labeled with Hg^{203}, in Dimethylformamid. O. A. Reutov, V. I. Sokolov, and I. P. Beletskaya	1458	1561
Rate Constant and Mechanism of the Reaction of Atomic Oxygen with 1,2-Dichloroethane. L. I. Avramenko, R. V. Kolesnikova and N. L. Kuznetsova	1462	1565
Structure and Spectra of Vinyl Sulfides. P. P. Shorygin, M. F. Shostakovskii, E. N. Prilezhaeva, T. N. Shkurina, L. G. Stolyarova, and A. P. Genich	1468	1571
Isopropenyl and Vinyl Derivatives of Tri- and Penta-Valent Antimony. A. N. Nesmeyanov, A. E. Borisov and N. V. Novikova	1473	1578
The Reaction of Free Radicals with Asymmetric Organomercury Compounds. A. N. Nesmeyanov, A. E. Borisov, E. I. Golubeva, and A. I. Kovredov	1477	1582
Reactions of Halogen Replacement of a Mercury Atom Connected to a Saturated Carbon Atom. Communication 1. Interaction of Benzylmercury Chloride with Iodine, in the Presence of Iodide Ion, in Dioxane. I. P. Beletskaya, O. A. Reutov, and T. P. Gur'yanova	1483	1589
Disproportionation Reactions of Organic Compounds Containing Zirconium, Titanium, and Iron. E. M. Brainina, and R. Kh. Freidlina	1489	1595

CONTENTS (continued)

	PAGE	RUSS. PAGE
Interaction of Epichlorohydrin with Phosphorus Acid Chlorides. N. I. Rizpolozhenskii and A. A. Muslinkin	1493	1600
Fluorine Containing β-Sultones. Part II. Preparation of Fluoromethanesulfonyl Fluoride and Difluoromethanesulfonyl Fluoride. G. A. Sokol'skii and I. L. Knunyants	1499	1606
On the Telomerization Reaction of Dimethylcyclosiloxanes. Article 2. Preparation of Linear α-Chloro-ω-Trimethylsiloxydimethylsiloxanes. K. A. Andrianov, V. V. Severnyi and B. G. Zavin	1502	1610
Synthesis of Liquid 1,n-Hexamethylpoly(Phenylethyl)Methylsiloxanes and Investigation of Their Properties. K. A. Andrianov, A. A. Zhdanov, and V. A. Odinets	1507	1615
Reactions of Bis(Trimethylsiloxy)Dichlorosilane with Alcohols, Phenols, and Alkoxides. K. A. Andrianov and V. V. Severnyi	1515	1624
The Thermal Decomposition of Adducts of Abietic Acid and Its Esters with Maleic Anhydride. B. A. Arbuzov and A. G. Khismatullina	1520	1630
An Investigation in the Field of the Stereochemistry of Cyclic Compounds Communication 42. Synthesis and Catalystic Hydrogenation of 7-methoxy-1, 2-bis-(hydroxymethyl)-hexahydrophenanthrenes V. M. Andreev and V. F. Kucherov	1525	1636
β-Dicarbonyl Compounds. Communication 10. The Difference in Chemical Behavior Between Aliphatic and Cyclic β-Dicarbonyl Compounds. S. I. Zav'yalov and L. P. Vinogradova	1529	1640
The Chemistry of Acetals. Communication 6. The Dimerization of Acetals of α,β-Unsaturated Aldehydes. S. S. Yufit and V. F. Kucherov	1534	1646
Chemistry of Acetals. 7. Polarographic Investigation of Some Hydrolysis Products of Tetraethyl Acetals of Malonic and β-Ethoxyglutaric Dialdehydes. L. A. Yanovskaya and V. F. Kucherov	1538	1650
Alkenylation of p- and o-Cresols with Piperylene. E. A. Viktorova, N. I. Shuikin, and B. G. Bubnova	1544	1657
Alkylation of Phenols with Mixed-Functional Compounds. 2. Alkenylation of o- and p-Cresols with Allyl Alcohol. N. I. Shuikin, E. A. Viktorova, I. E. Pokrovskaya, and T. G. Malysheva	1547	1660
Investigation of the Catalytic Properties of Rare Earth Oxides. Communication 2. Conversion of Cyclohexene, 1-Methylcyclohexene-1 and n-Heptene-1 on Erbium Oxide. Kh. M. Minachev, M. A. Markov and O. K. Shchukina	1552	1665
Investigation into the Effect of Thiophene on the Catalytic Activity of an Industrial Aluminium-Molybdenum Catalyst. Kh. M. Minachev, V. S. Smirnov, D. A. Kondrat'ev and G. A. Loginov	1556	1669
The Catalytic Properties of Rhenium Sulfide-Alumina Catalyst in the Dehydrogenation of Cyclohexane Under Pressure. Kh. M. Minachev, M. A. Ryashentseva and Yu. A. Afranas'eva	1559	1673
The Partial Esterification of Some Amino Acids and Glutathione. V. M. Stepanov and G. L. Muratova	1563	1677
The Preparation and Properties of Carboxyalkylene Derivatives of Citraconic Acid Imine. T. V. Sheremeteva, T. Yu. Stolyarova, and G. N. Larina	1566	1680

CONTENTS (continued)

	PAGE	RUSS. PAGE
The Synthesis and Reactions of New Vinyl Esters. M. F. Shostakovskii, N. V. Kuznetsov, and Yang Che-min	1570	1685
The Problem of Determination of the Direction of the Mesomeric Effect of Substituents by the Sutton Rule. M. G. Voronkov	1573	1688
Investigation of the Homogeneous Destructive Hydrogenation of Butylphenols Under Hydrogen Pressure. A. E. Gavriloa and M. G. Gonikberg	1576	1691
The Catalytic Hydrocondensation of Carbon Monoxide with Olefins and Their Hydropolymerization Under the Influence of Carbon Monoxide and Hydrogen. Communication 32. Conversion of Octene-1. N. I. Ershov, Ya. T. Eidus and V. R. Erokhina	1580	1696
SHORT COMMUNICATIONS		
The Structure of N-Benzylpyridinium-γ-Cyclopentadienylide. D. N. Kursanov and N. K. Baranetskaya	1586	1703
High Temperature Hydrogenation Destruction of Xylenes. A. A. Krichko and L. S. Sovetova	1587	1704
The Synthesis of ω-Thienylalkane Acids from ω-Chloroalkane Acids. L. I. Belen'kii, S. Z. Taits, and Ya. L. Gol'dfarb	1589	1706
An Apparatus for Mixing Heterogeneous Systems and Measuring the Apparent Volume of Precipitates or Layers of Liquids. A. I. Ul'yanov	1592	1709
Homogeneous Destructive Hydrogenation of Xylenes. M. G. Gonikberg, A. E. Gavrilova, and V. E. Nikitenkov	1595	1711
Catalytic Hydrogenation of Aromatic Nitriles and the Properties of Polyamides Obtained from p-(β,β'-Diaminodiethylbenzene). L. Kh. Freidlin, T. A. Sladkova, G. I. Kudryavtsev, T. I. Shein, E. N. Zil'berman, and R. G. Fedorova	1598	1713
LETTERS TO THE EDITOR		
Sulfonation of Cyclopentadienyl Compounds of Zirconium. E. M. Brainina, M. Kh. Minacheva, and R. Kh. Freidlina	1601	1716
The Reaction of Atomic Hydrogen with Solid Acetylene at a Temperature of 77°K. A. N. Ponomarev and V. L. Tal'roze	1602	1716
A New Method for Preparing Cyclic Silicoorganic Compounds. O. M. Nefedov, M. N. Manakov, and A. D. Petrov	1603	1717
Synthesis and Properties of Arylfluorosilicon Hydrides. E. A. Chernyshev, M. E. Dolgaya, and A. D. Petrov	1604	1718
NEWS ITEMS		
Conference on the Structure of the Mendeleev Periodic System. A. V. Lapitskii	1605	1719

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 10 October, 1961

CONTENTS

	PAGE	RUSS. PAGE
Program for the Building Up of Communism	1611	1725
INORGANIC AND ANALYTICAL CHEMISTRY		
Reactions in the Solid Phase of Silica with Oxides of Rare Earth Elements (La_2O_3, Nd_2O_3, Gd_2O_3). É. K. Keler, N. A. Godina, and E. P. Savchenko	1613	1728
Reactions in the Solid Phase between Silica and Praeseodymium Oxide. É. K. Keler, N. A. Godina, and E. P. Savchenko	1619	1735
PHYSICAL CHEMISTRY		
An Investigation of the Structure and Reactivity of Some Stable Radicals. M. B. Neiman and A. L. Buchachenko	1624	1742
Polarographic Study of the Effect of Temperature on the Protonation Rate of the Maleic Acid Di-anion. S. G. Mairanovskii and L. I. Lishcheta	1631	1749
The Inductive Effect in the Oscillational Frequencies of the Bonds Ge—H and Ge—D. V. A. Ponomarenko, G. Ya. Zueva, and N. S. Andreev	1639	1758
The Effect of the Thermodynamic Isotope Effect on the Distribution of Isotopic Molecules. G. A. Skorobogatov	1644	1763
ORGANIC AND BIOLOGICAL CHEMISTRY		
Tautomerism and Geometric Isomerism of Nitrogen-Containing Derivatives of Carbonyl Compounds. Communication 5. Polarographic Study of Semicarbazones and Thiosemicarbazones of Aromatic Aldehydes. Yu. P. Kitaev, G. K. Budnikov, and A. E. Arbuzov	1652	1772
Preparation of (Ethylcyclopentadienyl)manganese Tricarbonyl. A. N. Nesmeyanov, K. N. Anisimov, and Z. P. Valueva	1659	1780
Synthesis and Study of the Reactivity of Polymerizable Organometallic Derivatives of p-Vinylbenzoic Acid. M. M. Koton and T. M. Kiseleva	1662	1783
Telomerization of Dimethylcyclosiloxanes. Communication 3. Telomerization Reactions with Dichloromethylvinylsilane and Dichloromethylphenylsilane. K. A. Andrianov and V. V. Severnyi	1666	1788
Reaction of Trialkyl (or Aryl) Silanols with (Ethoxymethylsilyl)methyl Dimethylphosphinates. K. A. Andrianov and I. K. Kuznetsova	1670	1792
Rearrangement Occurring in the Dehydrochlorination of 1,1- and 1,2-Bistrichlorosilyl-1,2-dichloroethanes with Aluminum Chloride. V. F. Mironov and V. V. Nepomnina	1673	1795
Synthesis of Surface-Active Substances from ω-Chloro Carboxylic Acids. S. A. Dmitriev, N. M. Karavaev, and A. V. Smirnova	1678	1800
Synthesis of 4,6,7,8-Tetrahydro-5-vinyl-2(3H)-naphthalenone and Its Condensation with 2-Methyl-1,3-cyclohexanedione to Give 14ξ-Hydroxy-D-homo-19-norandrosta-4,9(10)-diene-3,17a-dione. N. N. Gaidamovich and I. V. Torgov	1682	1803

CONTENTS (continued)

	PAGE	RUSS. PAGE
Heterogeneity of Nitrolignin. A. A. Chuksanova, O. P. Grushnikov, and N. N. Shorygina	1688	1810
Raman-Spectrum Investigation of the Conformations of the Cyanohydrins of Some Cyclohexanone Derivatives. M. I. Batuev, A. A. Akhrem, A. V. Kamernitskii, and A. D. Matveeva	1691	1813
Stereochemistry of Heterocyclic Compounds. Communication 7. Steric Structures of Octahydro-4(1H)-quinolone Derivatives and the Configurations of Decahydroquinolines. É. A. Mistryukov and V. F. Kucherov	1695	1816
Stereochemistry of Heterocyclic Compounds. Communication 8. Debenzoylation and Stereochemistry of Decahydroquinoline and Its Derivatives. É. A. Mistryukov and V. F. Kucherov	1702	1826
Chemistry of Acetals. Communication 8. Grignard Reactions with 1,1,3,3-Tetraethoxypropane, 1,1,3,5,7,7-Hexaethoxyheptane, and 1,1,3,5,7,9,9-Heptaethoxynonane. L. A. Yanovskaya and V. F. Kucherov	1706	1830
Pyridine Bases Derived from 1-Buten-3-ynes. Communication 7. Synthesis of Pyridine Bases by the Condensation of 2-Methyl-1-buten-3-yne with Ketones and Ammonia. I. L. Kotlyarevskii and E. D. Vasil'eva	1710	1834
Butadiyne Derivatives. Communication 9. Synthesis of Unsaturated Alkoxy and Alkylthio Acetals Having C_7–C_{15} Carbon Chains in Their Molecules. A. V. Bogdanova, G. I. Plotnikova, and I. P. Yakovlev	1715	1841
Alkylation of Phenols with Compounds with Mixed Functions. Communication 3. Alkenylation of m- and p-Cresols with 3-Buten-1-ol. N. I. Shuikin, E. A. Viktorova, I. E. Pokrovskaya, and T. G. Malysheva	1720	1847
Alkylation of Phenols with Compounds with Mixed Functions. Communication 4. Alkenylation of m- and p-Cresols with 4-Penten-1-ol. N. I. Shuikin, E. A. Viktorova, I. E. Pokrovskaya, and T. G. Malysheva	1725	1851
Catalytic Synthesis of Nitriles. Communication 5. Conversion of Isoalkanols into Nitriles by Means of Ammonia. M. A. Popov and N. I. Shuikin	1729	1855
Determination of the Individual Hydrocarbon Composition of Tartary Petroleums. Communication 6. Ligroin from Petroleum from the Shugurov Deposits. B. Le, F. A. Urmancheev, I. P. Lipatova, R. G. Bukharaeva, and I. A. Lamanova	1732	1858
Composition of the Butenes Formed in the Catalytic Dehydration of 2-Butanol. A. A. Balandin, E. I. Klabunovskii, and E. F. Litvin	1737	1863
Catalytic Hydrocondensation of Carbon Monoxide with Olefins and Their Hydropolymerization Under the Action of Carbon Monoxide and Hydrogen. Communication 33. Formation of Higher Hydrocarbons with a Nonmultiple Number of Carbon Atoms with Respect to the Original Olefin. N. I. Ershov, Ya. T. Éidus, and V. R. Erokhina	1744	1871
Catalytic Hydrocondensation of Carbon Monoxide with Olefins and Their Hydropolymerization Under the Action of Carbon Monoxide and Hydrogen. Communication 34. Mutual Transitions of the Reactions of the Formation of Hydrocarbons from Mixtures of Ethylene, Hydrogen, and Carbon Monoxide. Ya. T. Éidus, N. I. Ershov, and V. R. Erokhina	1747	1874
Composition of Products of the Bromination of 2-Thienyl Ketones in Presence of Excess of Aluminum Chloride. Yu. B. Vol'kenshtein, B. V. Lopatin, and V. A. Petukhov	1752	1879
BRIEF COMMUNICATIONS		
An Improved Method of Determining Surface Area by the Absorption of Air. A. L. Klyachko-Gurvich	1756	1884

CONTENTS (continued)

	PAGE	RUSS. PAGE
The Synthesis of Alkenylsilanes by the High-Temperature Condensation of Unsaturated Compounds with Silicon Hydrides. V. F. Mironov and V. V. Nepomnina	1759	1886
The β-Alloxymethyl n-Butyl Acetal of Acetaldehyde. A. K. Gorban'	1761	1889
The Reaction of Poly-(vinyl Alcohol) with Poly-(methacrylic Acid). M. F. Shostakovskii, A. M. Khomutov, and N. M. Khomutova	1763	1890
Phase Transformations in the Preparation of Ni–MgO Catalysts by the Decomposition of Oxalates in a Current of Hydrogen. V. M. Akimov, E. F. Litvin, A. M. Rubinshtein, and L. Kh. Freidlin	1765	1892
The Production of Dialkylaluminum Hydrides from Dialkylaluminum Halides and Sodium Hydride. L. I. Zakharkin and I. M. Khorlina	1768	1894
The Dichlorides of p-Styrylphosphonous and p-Styrylphosphonic Acids. M. I. Kabachnik and E. N. Tsvetkov	1770	1896
The Decomposition of Phenyldiazonium Borofluoride in Nitrobenzene in the Presence of Zinc, Cadmium, and Silver Powders. L. G. Makarova and M. K. Matveeva	1772	1898
The Oxidation of Low-Molecular-Weight Hydroxyl Compounds with Oxides of Nitrogen. N. Ya. Lenshina, M. F. Denikeeva, and V. I. Ivanov	1774	1899
1-Cyclopropyl-2-α-furylcyclopropane and Its Conversions. A. P. Meshcheryakov, V. G. Glukhovtsev, and N. N. Lemin	1776	1901
The Magnetic Susceptibility of Derivatives of Salicylalimine and Some Other Organic Compounds. V. I. Belova and Ya. K. Syrkin	1778	1903
Oxidative Polycondensation of Diacetylenes. I. L. Kotlyarevskii, L. B. Fisher, and E. S. Domnina	1780	1905
Synthesis of Diquaternary Ammonium Salts of Hexamethylenediamine. M. F. Shostakovskii, V. P. Denisenko, and A. K. Gorban'	1782	1907
Synthesis of 1,10-Decanedicarboxylic Acid from Cyclododecatriene-1,5,9. L. I. Zakharkin, V. V. Korneva, and G. M. Kunitskaya	1784	1908
Fluorinated Monocarboxylic Acids. I. L. Knunyants, Li Chai-Yuan, and V. V. Shokina	1785	1910
Use of the Reaction between Dilithioorganic Compounds and Metal Halides to Synthesize Polymers with a Conjugated System of Double Bonds. V. Ya. Bogomol'nyi and B. A. Dolgoplosk	1787	1912
Structure of the Complex Compounds of Diphenylboron Chloride with Primary Amines. B. M. Mikhailov and N. S. Fedotov	1788	1913
Synthesis of DL-19-Nor-d-homotestosterone and Its 17a-Alkylhomologs. S. N. Ananchenko, V. M. Rzheznikov, V. N. Leonov, and I. V. Torgov	1789	1913
General Meeting of the Division of Chemical Science of the Academy of Sciences, USSR	1790	1915

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 11 November, 1961

CONTENTS

	PAGE	RUSS. PAGE
Reactions Between Ce_2O_3 and SiO_2 at High Temperatures. A. I. Leonov, V. S. Rudenko, and É. K. Keler	1797	1925
Physicochemical Investigation of the Reaction Between Lanthanum Hydroxide and Hydrogen Peroxide. S. Z. Makarov, L. V. Ladeinova-Soboleva, and A. M. Chernyshova	1805	1933
Physicochemical Investigation of the Reaction Between Neodymium Hydroxide and Hydrogen Peroxide. S. Z. Makarov and L. V. Ladeinova-Soboleva	1811	1940
Adsorption of a Mixture of Gases. 6. Adsorption Equilibrium in the System Water–n-Heptane – Silica Gel. B. P. Bering and V. V. Serpinskii	1817	1947
Mechanism of Dehydrogenation of Cyclohexane on the Crystalline α-Oxide of Chromium. A. A. Balandin and I. D. Rozhdestvenskaya	1824	1955
Study of the Electrophilic Substitution Reaction at an Olefine Carbon Atom. I. Reaction of Trans-β-Chlorvinylmercury Chloride with Iodine in the Presence of Iodine Anion in Aqueous Dioxane. I. P. Beletskaya, O. A. Reutov, and V. I. Karpov	1830	1961
The Laws Governing the Effect of Inhibitors in the Oxidation of Polypropylene. Yu. A. Shlyapnikov, V. B. Miller, and E. S. Torsueva	1834	1966
The Determination of the Rate Constants of the Simple Reactions of Hydrogen Atoms. 1. The Rate Constant for the Recombination of $H + H + H_2 \rightarrow 2H_2$ and the Rate Constant for the Reaction $H + O_2 + H_2 \rightarrow HO_2 + H_2$. L. I. Avramenko and R. V. Kolesnikova	1839	1971
Study of the Vibration Spectra of Methacrylic Acid Derivatives Containing Group IV Elements. L. A. Leites, Yu. P. Egorov, G. S. Kolesnikov, and S. L. Davydova	1844	1976
The Reaction of Organic Magnesium Compounds with (Ferrocenylmethyl)trialkylammonium Salts. A. N. Nesmeyanov, É. G. Perevalova, and L. S. Shilovtseva	1850	1982
The Synthesis of α-Chloro-ω-Sulfocarboxylic Acids. R. Kh. Freidlina, B. V. Kopylova, and A. N. Nesmeyanov	1853	1985
Solutions of Aromatic Organic Lithium Compounds in Ethers. T. V. Talalaeva, A. N. Rodionov, and K. A. Kocheshkov	1857	1990
Substitution Reactions of a Mercury Atom Combined with a Saturated Carbon Atom, by Halides. 2. Reaction of Benzylmercury Chloride with Iodine in the Presence of Iodine Ion in Dimethylformamide, Methanol, and Ethanol. I. P. Beletskaya, O. A. Reutov, and T. P. Gur'yanova	1863	1997
Reaction of Aryl(Alkyl)Aminomethylethoxysilanes with Alkyl(Aryl)Hydroxysilanes. K. A. Andrianov and L. M. Volkova	1868	2003

CONTENTS (continued)

	PAGE	RUSS. PAGE
Addition of Alkoxysilanehydrides to Unsaturated Nitriles and Hydrogenation of the ω-Cyanoalkylalkoxysilanes Obtained. V. M. Vdovin, R. Sultanov, T. A. Sladkova, L. Kh. Freidlin, and A. D. Petrov	1872	2007
Esters of β-Ketophosphonic Acids. 8. Reaction of 2,6-Dibromocyclohexanone with Triethyl Phosphite. B. A. Arbuzov, V. S. Vinogradova, and N. A. Polezhaeva	1877	2013
Esters of β-Ketophosphonic Acids. 9. Reaction of 2,6-Dibromo- and 2,6-Dichlorocyclohexanone with One and Two Moles of Triethyl Phosphite. B. A. Arbuzov, V. S. Vinogradova, and N. A. Poleshaeva	1884	2020
Synthesis of Diphenylvinylphosphine Oxide. M. I. Kabachnik, T. Ya. Medved', Yu. M. Polikarpov, and K. S. Yudina	1891	2029
Isomerization of Free Alkyl Radicals in Solution. O. A. Reutov and T. N. Shatkina	1894	2032
Rearrangement of the Propyl Cation Formed by the Action of Nitrous Acid on Propylamine Perchlorate. O. A. Reutov and T. N. Shatkina	1900	2038
Sterochemistry of Heterocyclic Compounds. 9. Synthesis of O-Acetates of Isomeric Decahydro-4-Quinolinols and Study of the Possibility of O → N Migration in the Decahydroquinoline Series. E. A. Mistryukov and V. F. Kucherov	1905	2044
β-Dicarbonyl Compounds. 11. Reaction of 2-Acylcycloalkanones with Hydrogen Peroxide. L. P. Vinogradova and S. I. Zav'yalov	1911	2050
Transformations of Butylphenols over Dehydrocyclization Catalysts. N. I. Shuikin, E. A. Viktorova, Li Shi, and É. A. Karakhanov	1914	2054
Catalytic Transformations of 1-Methylcyclohexene. N. I. Shuikin, E. D. Tulupova, and B. L. Lebedev	1918	2058
Determination of the Individual Hydrocarbon Composition of Gasolines of Tartary Petroleums. 7. Gasoline from Petroleum of the Shugurov Deposits. F. A. Urmancheev, B. Le, R. G. Bukharaeva, I. A. Lamanova, and I. P. Lipatova	1922	2063
Free-Radical Addition of Cyclopentanone and Cyclohexanone to α-Olefins and Allyl Ethers. G. I. Nikishin, G. V. Somov, and A. D. Petrov	1925	2065
Vinyl Compounds in the Diene Synthesis. 8. Diene Condensation of Vinyl Ethers and Sulfides with Anthracene. M. F. Shotakovskii, A. V. Bogdanova, and A. N. Volkov	1930	2072
Synthesis and Polymerization of Diallyl Tartrate. M. F. Shostakovskii, A. M. Khomutov, I. A. Chekulaeva, and N. M. Khomutova	1933	2075
BRIEF COMMUNICATIONS		
Complexes of Decaborane with Organic Phosphorus and Arsenic Compounds. L. I. Zakharkin and V. I. Stanko	1936	2078
Reaction of Tetrahydrofuran and Tetrahydropyran with Trimethylbromosilane and Trimethylchlorosilane. L. I. Zakharkin, V. I. Stanko, and V. A. Brattsev	1938	2079
Hydrogen Isotope Effect in Primary Alkyl Chlorides in the Presence of Aprotic Acids. V. N. Setkina, D. N. Kursanov, S. V. Vitt, and N. S. Martinkova	1940	2081
Reaction of Decaborane and Pentaborane with Mercaptans and Sulfides. L. I. Zakharkin, V. I. Stanko, and O. Yu. Okhlobystin	1942	2083
Synthesis of Some Dialkylamine-boranes and Alkylmercapto-(dialkylamino) Boranes. B. M. Mikhailov and V. A. Dorokhov	1944	2084
Reaction of Tetrahydrosilvane and Silvane with Sulfur. N. I. Shuikin and V. V. An.	1946	2086
Volumetric Termination in Microdetermination of Carbon and Hydrogen after Decomposition of Organic Substances by Combustion in a Stream of Oxygen. V. A. Klimova and G. F. Anisimova	1948	2088

CONTENTS (continued)

	PAGE	RUSS. PAGE
Heat Conduction of 2,4,6-Trinitrotoluene in the Solid and Liquid States. G. B. Ravich and Yu. N. Burtsev	1951	2091
Neutronographic Study of Carbides and Nitrides of Titanium. M. S. Gorbunov, N. A. Shishakov, G. G. Sadikov, and A. A. Babad-Zakhryapin	1953	2093
The Reactions of Alkenyl- and Alkylgermanium Chlorides with Hydrogen Bromide. V. F. Mironov, N. G. Dzhurinskaya, and A. D. Petrov	1956	2095
A New Method for the Synthesis of Macrocyclic Ketones. L. D. Bergel'son, Yul. G. Molotkovskii, and L. I. Ilyukhina	1959	2099
LETTERS TO THE EDITOR		
A New Method for Preparing Stereospecific Silica Gels. E. I. Klabunovskii, L. M. Volkova, and A. E. Agronomov	1962	2101
Exchange Reactions Between Esters of Boric and Boroorganic Acids and Their Thioanalogs. B. M. Mikhailov and L. S. Vasil'ev	1962	2101
The Synthesis of 3,3,3-Trichloro-1-Propene. A. N. Nesmeyanov and R. Kh. Freidlina	1963	2102
N-β-Mercaptoethylation of Amino Acid Esters. L. G. Bulavin	1963	2103

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

Division of Chemical Science

Number 12 December, 1961

CONTENTS

	PAGE	RUSS. PAGE
The Results of the 22nd Congress of the Communist Party of the Soviet Union	1969	I
A Physicochemical Study of the Reaction Between Praseodymium Hydroxide and Hydrogen Peroxide. S. Z. Makarov, L. V. Ladeinova-Soboleva and A. M. Chernyshova	1971	2109
Adsorption and Heat of Adsorption of Diethyl Ether, Acetone and Acetic Acid Vapors on Graphitized Carbon Black. N. N. Avgul', A. V. Kiselev and I. A. Lygina	1977	2116
Investigation of the Reaction of Electrophilic Substituents on Olefinic Carbon Atoms. 2. Reaction of Trans- and Cis-β-chlorovinyl Mercury Chloride with Iodine in the Presence of Cadmium Iodide in Absolute Methanol. I. P. Beletskaya, O. A. Reutov, and V. I. Karpov	1985	2125
Investigation of the Reaction of Electrophilic Substituents on Olefinic Carbon Atoms. 3. Reaction of Trans- and Cis-β-chlorovinyl Mercury Chloride with Iodine in the Presence of Cadmium Iodide in Dimethylformamide. I. P. Beletskaya, O. A. Reutov, and V. I. Karpov.	1989	2129
The Dependence of the Frequency of Vibration of the Ge-C Bond in the Spectra of Alkylgermanes on the Nature of the Substituents. L. A. Leites, Yu. P. Egorov, G. Ya. Zueva, and V. A. Ponomarenko.	1993	2132
The Influence of the Dimerization of Free Radical Intermediates on the Polarographic Waves of Aromatic Aldehydes and Ketones in an Acid Medium. S. G. Mairanovskii	2003	2140
Acyl and Alkoxy Derivatives of Dicyclopentadienyltitanium and the Refraction Increment of the π-C_5H_5Ti Group. A. N. Nesmeyanov, O. V. Nogina, A. M. Berlin, A. S. Girshovich, and G. V. Shatalov.	2008	2146
Addition of Nucleophilic Reagents to 2-Cyanovinyl Ketones. A. N. Nesmeyanov, M. I. Rybinskaya, and L. V. Rybin.	2013	2152
Vinyltin Compounds in Diene Synthesis with Cyclones. B. A. Arbuzov, L. A. Shapshinskaya, and M. I. Kudryavtseva.	2020	2160
Phosphoric and Phosphorothioic Esters Containing Heterocyclic Groups. Communication 4. Reaction of Phosphorochloridic and Phosphorochloridothioic Compounds with 2-Aminopyridine. B. A. Arbuzov, V. M. Zoroastrova, and M. P. Osipova.	2023	2163
Reactions of Chloro(Trimethylsiloxy)Silanes. K. A. Andrianov and N. V. Delazari	2028	2169
Gas-Phase Reaction of Bromo- and Chloro-Silanes Containing Silicon-Attached Hydrogen with Some Organic Bromo Compounds and with Alkylchlorobenzenes. E. A. Chernyshev, N. G. Tolstikova, and E. F. Bugerenko	2032	2173
Replacement of a Mercury Atom Attached to a Saturated Carbon Atom by Halogen. Communication 3. Reaction of Benzylmercury Chloride with Iodine in Carbon Tetrachloride. I. P. Beletskaya, O. A. Reutov, and T. P. Gur'yanova	2036	2178
Chemistry of Acetals. Communication 9. Mechanism of the Trimerization of Acrolein Acetal. S. S. Yufit and V. F. Kucherov	2040	2183

CONTENTS (continued)

	PAGE	RUSS. PAGE
β-Dicarbonyl Compounds. Communication 13. Chemical Properties of Meldrum's Acid. S. I. Zav'yalov	2042	2185
Synthesis and Transformations of (Dihydroanthrylene)Naphthohydroquinone (contribution to the Stereochemistry of catalysis). A. A. Balandin, E. I. Klabunovskii and L. V. Antik	2046	2189
Alkylation of Phenols with Bifunctional Compounds. Communication 5. Catalytic Alkylation of m- and p-Cresols with 1,3-Butanediol. N. I. Shuikin, E. A. Viktorova, and I. E. Pokrovskaya	2049	2192
Thermal Alkylation of Tetrahydro-2-Methylfuran with Ethylene. N. I. Shuikin and B. L. Lebedev	2052	2195
Catalytic Synthesis of High-Density C_{20}–C_{38} Isoparaffins. A. P. Meshcheryakov, E. I. Érzyutova, and Go Chun'-i	2055	2198
Acceleration and Retardation of the Cracking of Hydrocarbons in Various Media. Ya. M. Paushkin, A. V. Topchiev, A. V. Nepryakhina, P. G. Anan'ev, and N. N. Dmitrevskii	2060	2204
Synthesis of Tri- and Tetra-Phenylalkanes and Study of Their Hydrogenation. M. A. Chel'tsova and A. D. Petrov	2065	2209
Vinyl Compounds in the Diene Synthesis. Communication 9. Some Properties of Adducts in Diene Condensations with Vinyl Sulfides. M. F. Shostakovskii, A. V. Bogdanova, and T. M. Ushakova	2073	2217
Copolymerization of 1-Vinyl-2-Pyrrolidinone with Methyl Methacrylate and with Acrylonitrile. M. F. Shostakovskii, A. M. Khomutov, and F. P. Sidel'kovskaya	2077	2222
Mechanism of the Oxidation of Cellulose Ethers and Esters with Oxygen. O. P. Koz'mina	2081	2226
SHORT COMMUNICATIONS		
Microdetermination of Methoxy and Ethoxy Groups. V. A. Klimova and K. S. Zabrodina	2088	2234
The Reduction of CeO_2 in the Ketonization of CH_3COOH. A. M. Rubinshtein, A. A. Slinkin, V. I. Yakerson, and É. A. Fedorovskaya	2090	2235
Synthesis of N-β-Trifluoroethyl Derivatives of Maleic and Citraconic Acids. T. V. Sheremeteva, Z. V. Borisova, and V. V. Kudryavtsev	2093	2237
Influence of the Structure of the Double Layer on the Polarographic Behavior of Nitro Compounds. S. G. Mairanovskii and Ya. P. Stradyn'	2095	2239
Kinetics of the Decomposition of Symmetrical Organomercury Compounds. A. N. Nesmeyanov, A. E. Borisov, and I. S. Savel'eva	2098	2241
Chromatographic Isolation of Menthol. E. I. Klabunovskii, A. A. Balandin, and I. F. Godunova	2100	2243
The Action of Butyllithium and Butylmagnesium Bromide on Trans-Epoxycyclododecane. L. I. Zakharkin	2103	2245
A Simple Method for the Preparation of Sodium and Potassium Aluminium Hydrides. L. I. Zakharkin and V. V. Gavrilenko	2105	2246
Preparation of 1-Cyclopropyl-2-(4'-Hydroxy-1'-Oxobutyl)-Cyclopropane. A. P. Meshcheryakov and V. G. Glukhovtsev	2107	2248
Synthesis of 3,3,4-Trimethylpent-1-yne and 2,3,3,8,8,9-Hexamethyldeca-4,6-diyne. A. P. Meshcheryakov and L. V. Petrova	2110	2250
Conjugation Energy of Some Boron-Containing Systems. D. A. Bochvar, I. V. Stankevich, and A. L. Chistyakov	2112	2252
LETTERS TO THE EDITORS		
The Synthesis of Organoberyllium Compounds. L. I. Zakharkin, O. Yu. Okhlobystin, and B. N. Strunik	2114	2254

CONTENTS (continued)

	PAGE	RUSS. PAGE
Organomagnesium Synthesis of Heteroorganic Compounds in a Non-Ethereal Medium. L. I. Zakharkin, O. Yu. Okhlobystin, and B. N. Strunin	2115	2254
Stepwise Formation of a Heteroelement–Oxygen Chain in the Presence of Diazoalkanes. K. A. Kocheshkov, E. M. Panov, and N. N. Zemlyanskii	2116	2255
CHRONICLE		
General Meeting of the Division of Chemical Sciences of the Academy of Sciences of the USSR, September 21, 1961	2117	2256
Author Index, Nos. 1-12	2121	
Tables of Contents, Nos. 1-12	2130	